

EPA'S PROPOSED 111(d) RULE FOR EXISTING POWER PLANTS: LEGAL AND COST ISSUES

HEARING BEFORE THE SUBCOMMITTEE ON ENERGY AND POWER OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED FOURTEENTH CONGRESS FIRST SESSION

MARCH 17, 2015

Serial No. 114-20



Printed for the use of the Committee on Energy and Commerce
energycommerce.house.gov

U.S. GOVERNMENT PUBLISHING OFFICE

95-538

WASHINGTON : 2016

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
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¹ Available at: <http://docs.house.gov/meetings/if/if03/20150317/103073/hhrg-114-if03-wstate-tribel-20150317-u1.pdf>.

EPA'S PROPOSED 111(d) RULE FOR EXISTING POWER PLANTS: LEGAL AND COST ISSUES

TUESDAY, MARCH 17, 2015

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:00 a.m., in room 2123 of the Rayburn House Office Building, Hon. Ed Whitfield (chairman of the subcommittee) presiding.

Members present: Representatives Whitfield, Olson, Barton, Shimkus, Pitts, Latta, Harper, McKinley, Pompeo, Kinzinger, Griffith, Johnson, Long, Ellmers, Flores, Mullin, Upton (ex officio), McNerney, Tonko, Engel, Green, Capps, Castor, Sarbanes, Yarmuth, Loeb sack, and Pallone (ex officio).

Staff present: Nick Abraham, Legislative Clerk; Charlotte Baker, Deputy Communications Director; Leighton Brown, Press Assistance; Allison Busbee, Policy Coordinator, Energy and Power; Patrick Currier, Senior Counsel, Energy and Power; Tom Hassenboehler, Chief Counsel, Energy and Power; Mary Neumayr, Senior Energy Counsel; Chris Sarley, Policy Coordinator, Environment and Economy; Peter Spencer, Professional Staff Member, Oversight; Jean Woodrow, Director, Information Technology; Christine Brennan, Democratic Press Secretary; Jeff Carroll, Democratic Staff Director; Michael Goo, Democratic Senior Counsel, Energy and Environment; Caitlin Haberman, Democratic Professional Staff Member; Ashley Jones, Democratic Director, Outreach and Member Services; Rick Kessler, Democratic Senior Advisor and Staff Director, Energy and Environment; and John Marshall, Democratic Policy Coordinator.

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. I would like to call our hearing to order this morning, and today's title is EPA's Proposed 111(d) Rule for Existing Power Plants: Legal and Cost Issues. And we have two panels of witnesses this morning, and I want to thank those of you on the first panel. I will be introducing each one of you before you give your opening statement, and you will be given 5 minutes at that time, but before we are able to listen to your marvelous opening statements, you have to listen to our opening statements, which sometimes is not quite as exciting to people.

At this time, I would like to recognize myself for a 5-minute opening statement.

As I said, this morning our subcommittee will hold its first hearing this year on the EPA's proposed Clean Power Plan. We will examine specifically the circuitous and tortured rationale, in my opinion, of EPA that Section 111(d) of the Clean Air Act grants them the authority to regulate CO₂ emissions from electric generating units that are already regulated under Section 112. We are also going to look closely at the impact on states and consumers.

It appears that EPA is—excuse me just 1 minute. Given the stringency of this EPA proposed rule regarding CO₂ emissions at existing in coal plants, states are going to be forced to adopt state implementation plans within 1 year. And this regulation is so onerous for coal generation that, according to EPA's own projections, the amount of coal for electric generation in America would decline by 40 percent from the 2009 levels. The well-respected economic consulting firm, NERA, concluded that the proposal is the most expensive environmental regulation ever imposed on the electric power sector, costing between \$41 to \$73 billion per year, with 14 states facing peak year electricity price increases that are likely to exceed 20 percent. Regional grid reliability coordinators have begun warning that the rule will curse portions of the grid to suffer cascading outages and voltage collapse.

The North American Electricity Reliability Corporation recently produced an initial analysis that questioned the validity of the basic assumptions underlying the rule, and raised a multitude of concerns as to how the rule will affect the grid. This proposed rule has been described as a power grab, extreme, radical, unprecedented, and a violation of existing law. I agree with those characterizations. Even EPA has acknowledged that a literal application of Section 111(d) would likely preclude its proposal because the electric generating units are already regulated under Section 112. This proposed regulation would create turmoil in the generation, transmission, and distribution of electricity. It is being proposed because the President was unable to convince Congress to adopt a cap and trade legislation, and he has made international commitments without input or advice and consent from Congress, and in his Georgetown speech, he committed the U.S. to an extreme policy. It appears that EPA is trying to find a way to implement the President's plan pursuant to his international commitments, even though EPA has readily acknowledged that this proposal would not make a measurable difference in addressing climate change.

So this is a significant issue that is going to have a dramatic impact on everything relating to electricity generation in America, and it is our responsibility to make all of this transparent, to give the American people the opportunity to be aware of how extreme this is, and what a fundamental change it would make, and to address the question is it really legal. And that is what we intend to do today. That is why we are thrilled with the panel of witnesses that we have.

[The prepared statement of Mr. Whitfield follows:]

PREPARED STATEMENT OF HON. ED WHITFIELD

This morning our subcommittee will hold its first hearing of the year on the EPA's proposed "Clean Power Plan." At this point, everyone from legal scholars to state government officials to affected utilities has had opportunity to review this proposed rule. As we will learn today, many have expressed serious concerns whether EPA can move forward with the proposed rule. Given the potential adverse impacts on ratepayers, many also question whether the agency should do so.

EPA's plan to commandeer from state control nearly every major aspect of electricity generation, distribution, and use is based on section 111(d) of the Clean Air Act. However, there is a threshold question about whether EPA has statutory authority to proceed with its Clean Power Plan at all under that provision. Even assuming authority exists; neither the language of this provision nor its decades-long implementation history suggests that it authorizes such a sweeping federal agenda. This is especially true of the agency's attempts to regulate beyond the fence line of power plants by interfering with state decisions on matters like renewable portfolio standards and energy conservation mandates.

Equally troubling are the Constitutional issues. Federalism is a core principle in our system of government and has proven to be a key component of effective energy and environmental policy. Unfortunately, the Clean Power Plan presents an unprecedented effort to tip the federal/state balance towards federal dominance over state electricity systems. Not surprisingly, officials from more than half the states have questioned EPA's legal authority to pursue this regulation.

At risk is the discretion states have always had over the electricity generation mix. For example, my home state of Kentucky has chosen to rely mostly on coal to provide affordable and reliable electricity for its consumers and businesses. As a result, we are fortunate to have some of the lowest electricity rates in the country. Other states have chosen their own paths as they see fit to best serve their citizens' needs. But under the Clean Power Plan, each state's electricity plan would have to meet EPA's criteria for reducing carbon dioxide emissions and be approved by the agency.

Any state that does not have a plan approved by the Administrator of the EPA would be subject to a Federal plan being imposed on it. EPA has yet to tell us what this federal plan would entail, but it is unlikely to be a viable option so much as an approach to compel states to submit to EPA demands in order to get their state plans approved.

Given the Constitutional, statutory, and other legal issues surrounding the Clean Power Plan, I don't believe it will withstand judicial scrutiny. Given the tight deadlines under the proposed rule, states will be facing a decision about whether to submit their plans and initiate costly steps towards compliance before judicial review is complete. This would be unfortunate, because whether or not the Clean Power Plan is bad law, it certainly is bad policy.

Even Administrator McCarthy has admitted that none of EPA's climate rules would actually make a measurable difference on future temperatures. The Clean Power Plan will, however, make a difference in many areas of the country to those who pay an electric bill.

Indeed, the very purpose of the proposed rule is to replace affordability considerations with environmental ones in each state's electricity system. One study by NERA puts the total cost at \$366 billion through 2031 and estimates increases in electricity prices of 12 percent or more. Beyond costs, there are highly credible warnings that ratepayers would face reliability risks, which already are a concern because of several other EPA rules targeting coal-fired generation but would get worse under the Clean Power Plan. No wonder states are fighting back against EPA.

Mr. WHITFIELD. And with that, I would like to recognize the gentleman from California for his 5-minute opening statement.

OPENING STATEMENT OF HON. JERRY MCNERNEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. MCNERNEY. Thank you, Mr. Chairman.

You mentioned this is the first hearing on this issue this year, but it is our fourth hearing on this issue in the last few years. So climate change is here. I mean it is happening. It is not a matter

of speculation. We need to take action; we need to take it now. The longer we wait to take action on climate change, the more expensive it is going to be, the more damaging the effects of climate change are going to be, so it is incumbent upon us to do something about it. But the good news is that if the United States takes the lead, then we are going to be able to develop the technology, we are going to be able to export jobs, I mean we are going to be able to export materials, it is going to be a win for the United States, so we might as well embrace this now. Taking steps to curb carbon emission will have beneficial impacts such as repairing and replacing aging infrastructure with very high efficiency infrastructure.

Now, I know that the coal producers are worried about this, but my advice to them is embrace carbon sequestration. Embrace it, because coal is going to be reduced whether we like it or not, but if we embrace carbon sequestration, then we will be able to continue to use coal and keep those important American jobs. So that is my advice to the coal producers. But we are going to be able to increase our clean energy sources, renewable energy, energy efficiency and so on. So I think this is an opportunity for us.

Now, the Clean Air Act does give the EPA administrator the authority to put in place measures to reduce carbon dioxide production, and authority has been upheld in the courts. Now, I think we are going to hear some opinions about that this morning, but it has already been upheld in the courts.

Now, the EPA's proposal, in my opinion, is reasonable. It includes energy efficiency, it includes looking for new, more efficient sources of energy, and using demand issues to help us reduce our carbon emissions. Now, the administration does have the responsibility to take action to protect us from the effects of climate change, so that is exactly what the Clean Power Plan does. Fourteen states in the United States, including my home state of California, have embraced this proposal. In a letter to the EPA, they wrote that even greater levels of cost-effective carbon pollution reductions from the power sector are achievable in this time frame, using the system described by the EPA. The EPA found that the power sector could reduce its emissions by 26 percent below the 2005 levels under this initiative. That is a lot. Twenty-six percent reduction of the 2005 levels. That is significant, and that has put us in a leadership position. It has given other countries like China a motive to start reducing their carbon emissions, which is absolutely critical if we want to reduce carbon emissions in time to prevent the worst impacts of climate change. So this is really a win-win. But another thing that is really important is that the level of the amount of outreach that was done with this proposal was really unprecedented. The rule that we have in front of us is not final, so it is important for us to continue examining this issue, and to hear from all the stakeholders, and work together to find something that is going to benefit our Nation, put us in a leadership position, increase the economy, economic growth, and help stop climate change before the worst impacts are felt throughout the United States and throughout the world.

So with that, I am going to yield back, Mr. Chairman.

Mr. WHITFIELD. Thank you, Mr. McNerney.

At this time, I would like to recognize the chairman of the full committee, Mr. Upton, for 5 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Thank you, Mr. Chairman.

Today we continue our examination of what many folks believe is the most problematic of all the global warming-related regulations being churned out by this Administration; the proposed Clean Power Plan by EPA. And I welcome our witnesses who are going to be discussing both the legal and cost concerns with this proposed rule, as well as the looming compliance difficulties at the state level.

The Clean Air Act has been around since 1970, and we know from experience that it works best when implemented in the spirit of cooperative federalism. We have proven that we can accomplish a great deal to improve air quality when federal and state governments work together as partners. However, this proposed rule yanks the rug out from underneath the states with EPA dictating to the states, and effectively micromanaging intrastate electricity policy decisions to a degree even the agency admits is unprecedented. This raises a broad array of legal issues, not to mention that it is bad policy.

As a result, many states are sounding the alarm about the legality of the rule and the implications for their citizens and their ratepayers. In addition to significant constitutional and other legal questions, states have expressed concerns about the feasibility of EPA's proposed requirements and the likely impacts on electricity costs and reliability. The risks to ratepayers are especially serious in states that rely on coal for a substantial part of their electricity generation. Under the Clean Power Plan, states would be forced to redesign their electricity generation, transmission, and distribution systems and related laws and policies, and to do so over a short time frame. Longstanding policies would be essentially wiped clean, and jobs and family budgets could suffer as a result, particularly for the most vulnerable.

Today, we are going to hear several perspectives from both legal experts and state environmental and energy regulators. I am particularly concerned about the impacts on states, such as Michigan, which have a significant manufacturing sector. American manufacturers have shown that they can compete with anyone in the world, unless they face an uneven playing field caused by unilateral regulations like the EPA's proposed plan.

Other EPA regulations like the Utility MACT rule have already contributed to rising electric rates and growing concerns about reliability. With the economy still far from fully recovered, the last thing job creators need is another expensive regulation likely to drive up energy prices. And the last thing struggling families need is to see their electric bills go up as well.

So I hope that today's hearing will inform our efforts to develop commonsense policies that will ensure that electricity remains affordable and reliable in the coming decades. Jobs and the economy certainly are very important, and they remain our focus, and we

will continue to work to keep the lights on and the electricity bills affordable.

And I yield to other Republicans wishing to speak. Seeing none, I yield back the balance of my time.

[The prepared statement of Mr. Upton follows:]

PREPARED STATEMENT OF HON. FRED UPTON

Today we continue our examination of what many folks believe is the most problematic of all the global warming-related regulations being churned out by the Obama administration EPA—the proposed “Clean Power Plan.” I welcome our witnesses who will be discussing both the legal and cost concerns with this proposed rule as well as the looming compliance difficulties at the state level.

The Clean Air Act has been around since 1970, and we know from experience that it works best when implemented in the spirit of cooperative federalism. We have proven that we can accomplish a great deal to improve air quality when federal and state governments work together as partners. However, this proposed rule yanks the rug out from under states, with EPA dictating to states and effectively micro-managing intrastate electricity policy decisions to a degree even the agency admits is unprecedented. This raises a broad array of legal issues, not to mention that it is bad policy.

As a result, many states are sounding the alarm about the legality of the rule and the implications for their citizens and ratepayers. In addition to significant Constitutional and other legal questions, states have expressed concerns about the feasibility of EPA’s proposed requirements and the likely impacts on electricity costs and reliability.

The risks to ratepayers are especially serious in states that rely on coal for a substantial part of their electricity generation. Under the Clean Power Plan, states would be forced to redesign their electricity generation, transmission, and distribution systems and related laws and policies, and to do so over a short timeframe. Longstanding policies would be essentially “wiped clean,” and jobs and family budgets could suffer as a result.

Today, we will hear several perspectives from both legal experts and state environmental and energy regulators. I am particularly concerned about the impacts on states, such as my state of Michigan, which have a significant manufacturing sector. American manufacturers have shown that they can compete with anyone in the world—unless they face an uneven playing field caused by unilateral regulations like the EPA’s proposed plan.

Other EPA regulations like the Utility MACT rule have already contributed to rising electric rates and growing concerns about reliability. With the economy still far from fully recovered, the last thing job creators need is another expensive regulation likely to drive up energy prices. And the last thing struggling families need is to see their electric bills continue to go up.

I hope that today’s hearing will inform our efforts to develop commonsense policies that will ensure that electricity remains affordable and reliable in the coming decades. Jobs and the economy. That remains our focus. We will continue working to keep the lights on and the electric bills affordable.

Mr. WHITFIELD. Gentleman yields back.

At this time, I would like to recognize the gentleman from New Jersey, Mr. Pallone, the ranking member on the committee, 5 minutes.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Chairman Whitfield.

As we sit here today, unchecked climate change continues to reshape our world. According to NOAA, 2014 was the warmest year ever recorded, and 9 of the 10 hottest years have occurred since 2000. We know this warming is due to carbon pollution from fossil fuels accumulating in the atmosphere, trapping more heat and

changing our climate. We can already see the effects of this warming in rapidly-melting ice sheets and glaciers, extreme droughts and wildfires, increased storm damages, shrinking coral reefs, and beyond. Globally, the cost of these impacts easily reach into billions of dollars each year, and that trend shows no sign of slowing down.

To that end, EPA has proposed a workable plan to reduce emissions of carbon pollution from power plants, which are the largest uncontrolled source of manmade greenhouse gases in the U.S. Today, we will hear more about the Clean Power Plan, but there are few features that merit emphasizing in advance. First, the Clean Power Plan is not a one-size-fits-all proposal for reducing emissions. It uses a flexible state-based approach that takes account of each individual state's unique capacity to reduce emissions from its electricity sector. Second, EPA is not proposing that states act overnight. States have until 2030 to meet their final goals, and the plan's interim goals don't begin until 2020. Third, the Clean Power Plan falls well within the legal authority and responsibility of EPA to address carbon pollution from power plants. This system-wide approach is based on the plain language of the Clean Air Act. And finally, and perhaps most importantly, the Clean Power Plan is just a proposal and is not yet finalized.

EPA received over 3 ½ million public comments on the Clean Power Plan, and is reviewing these comments as we speak. EPA can and will make adjustments to its proposal. EPA is looking hard at a range of issues relating to timing, reliability, technical, and legal issues, and EPA is working in close coordination with states, utilities, grid operators, and other federal agencies like DOE and FERC to make sure the plan is done right.

And there are those who deny science. They claim that climate change is not real or manmade, that it is caused by natural cycles or sunspots, and that simply is untrue. The world's leading scientists have told us that climate change is happening, is caused by humans, and will have extremely serious impacts. The Republican-led Congress has not listened to the scientists, and has yet to take action to address these serious climate threats. And just saying no isn't an option anymore. We must reduce our carbon emissions, and the Clean Power Plan is a reasonable first step.

So those who have concerns with EPA's plan have a responsibility, in my opinion, to not just criticize it, but also to propose alternative ways to achieve the same goal. There are always those who are willing to make absurd arguments on behalf of companies that profit from the status quo, and we will hear today from some of these that EPA's plan is not legal, that it is unworkable, that some states may refuse to participate, but I think that those making those arguments aren't really interested in finding solutions to our carbon pollution problem. They are not interested in developing a plan to help us reduce emissions while still maintaining a safe, reasonably-priced electricity system. To quote the words of EPA Administrator McCarthy, they are just trying to put their heads in the sand. They are more than welcome to do that but history will not treat them kindly. Keep this in mind as we listen today and during future hearings and debates on the Clean Power Plan. I think you will be able to recognize those who are simply arguing for inaction on behalf of entrenched fossil fuel interests, and com-

pare them to those who want to act on climate change, and also want the development of our path forward to be thoughtful, sensible, and effective.

So for my part, I am in the latter camp, and I urge all of my colleagues to join me. And I look forward to hearing from the witnesses.

I don't think anybody on my side wanted time, is that correct? So I will just yield back my time. Thank you, Mr. Chairman.

Mr. WHITFIELD. Gentleman yields back. Thank you very much.

And that concludes our opening statements. So now we will turn to our panel of witnesses, and I am going to introduce each one of you individually before you give your opening statements.

So our first opening statement will be given by Mr. Laurence Tribe, who is the Carl M. Loeb University Professor and Professor of Constitutional Law, Harvard. Professor Tribe, welcome, and we look forward to your testimony. You are recognized for 5 minutes, and be sure to turn the microphone on because it is not on automatically. So thank you.

STATEMENTS OF LAURENCE H. TRIBE, CARL M. LOEB UNIVERSITY PROFESSOR AND PROFESSOR CONSTITUTIONAL LAW, HARVARD LAW SCHOOL; ALLISON D. WOOD, PARTNER, HUNTON AND WILLIAMS LLP; AND RICHARD L. REVESZ, LAWRENCE KING PROFESSOR OF LAW, DEAN EMERITUS, DIRECTOR, INSTITUTE FOR POLICY INTEGRITY, NEW YORK UNIVERSITY SCHOOL OF LAW

STATEMENT OF LAURENCE H. TRIBE

Mr. TRIBE. Mr. Chairman, members of the committee, I am honored to testify about EPA's proposed CO₂ power plant regulations. I have submitted my full written statement for the record.

EPA's proposal raises grave constitutional questions, exceeds EPA's statutory authority, and violates the Clean Air Act.

First, the plan conflicts with settled principles of federalism and Supreme Court precedent because it would commandeer state governments, treating them more like marionettes, dancing to the tune of a federal puppeteer, than like laboratories of democracy. It would dictate the CO₂ emissions target that each state must adopt within a year, commanding every state to enact an EPA-approved package of laws meeting that target by requiring power plants to shut down or reduce operations, consumers and businesses to use less electricity and pay more for it, and utilities to shift from coal to natural gas and other energy sources; a total overhaul of the states' way of life.

Now, reducing states to this submissive role would confound the political accountability that the Tenth Amendment guarantees. EPA's plan would increase energy costs over local opposition, while cloaking that increase in the Emperor's garb of state choice, with state governments taking the blame for policies actually dictated and necessitated by EPA. A state that submits no plan meeting EPA's approval by 2016 confronts a centrally-planned and administered federal scheme of uncertain scope, burdening the state of its citizens backed by draconian sanctions like the loss of federal funds under preexisting antipollution programs. Prominent defenders of

the EPA's proposal necessarily concede that noncomplying states gambling on whatever unpredictable backup plan EPA might impose would be at a huge disadvantage.

EPA's proposal also presents serious Fifth Amendment problems. We are all CO₂ emitters, and atmospheric CO₂ is the intermingled result of all human activity, but EPA would impose costs, that ought to be borne equitably by everyone, on a small group of power plants and companies after requiring those same companies to invest billions of dollars to reduce their non-CO₂ pollutants over the past 25 years. The Constitution demands just compensation to rectify that bait and switch.

Now, courts would never assume a congressional design to confer such revolutionary and constitutionally dubious power on EPA unless Congress clearly said so. But far from it, under the very Clean Air Act provision that EPA invokes, Section 111(d), Congress expressly prohibited EPA from doing exactly what it proposes to do here: regulate emissions from coal-fired power plants under Section 111(d), when those same power plants are already being regulated in costly ways under Section 112. In 1995, EPA itself read the Clean Air Act to prohibit such duplication, as did the D.C. Circuit Court of Appeals in 2008, and the U.S. Supreme Court in 2011.

If the Clean Air Act's meaning were ambiguous, and it isn't, settled principles of statutory interpretation would mean that EPA and any reviewing court would have to interpret the Act to avoid the constitutional difficulties that EPA's interpretation raises under the Fifth and Tenth Amendments. Now, to circumvent that avoidance principle, EPA resorts to sheer fantasy. It claims that Congress enacted a law in 1990 that never made it into the U.S. Code, and that everybody has been using the wrong version of the statute for the past quarter century. Really? Crediting that story would call into question dozens of similar statutory provisions throughout the U.S. Code. The tale is pure fiction. There is no mistake in the U.S. Code, but even if Congress had truly tossed two different bills in the air and told EPA to decide which one to catch and run with, that would be a power Congress could not give away, and EPA could not recognize and exercise. It is a law-making power that belongs only to you, backed by a judicial power that belongs only to the courts.

EPA is attempting an unconstitutional trifecta; usurping the prerogatives of the states, Congress and the federal courts all at once. Much is up for grabs in this complex area, but burning the Constitution of the United States, about which I care deeply, cannot be part of our national energy policy to deal with the problems of climate change.

Thank you very much.

[Mr. Tribe's testimony has been retained in committee files and can be found at:<http://docs.house.gov/meetings/if/if03/20150317/103073/hhrg-114-if03-wstate-tribel-20150317-u1.pdf>.]

Mr. WHITFIELD. Thank you, Professor Tribe.

At this time, our next witness is Allison Wood, who is a partner at Hunton and Williams. And welcome. We appreciate you being here, and you are recognized for 5 minutes.

STATEMENT OF ALLISON D. WOOD

Ms. WOOD. Good morning. It is an honor to appear before this subcommittee to offer testimony on EPA's proposed Section 111(d) rule.

I have practiced environmental law for over 16 years, and for the past decade, my practice has focused almost exclusively on climate change.

EPA's proposed rule suffers from a great many legal infirmities, and I will focus on two of those today. The first defect is that EPA is prohibited from regulating electric generating units under Section 111(d) because those units are already subject to regulation under a different provision of the Clean Air Act, Section 112, which regulates sources of hazardous air pollutants.

Section 111(d) has always been a little-used provision of the Clean Air Act that was designed to catch the handful of sources that were not regulated under the Act's other major provisions. Indeed, this provision has been used to regulate sources only five times since 1970. The confusion over this point comes from two amendments that were made to Section 111(d) during the 1990 amendments to the Clean Air Act, both of which appear in the Statutes at Large. EPA claims this leads to ambiguity, but in fact, the codifiers properly included in the United States Code only the House amendment; the amendment that clearly precludes regulation under Section 111(d) of source categories that are regulated under Section 112. This was appropriate, given that the managers of the Senate bill had expressly receded to the House amendment.

The second legal defect involves EPA's overbroad interpretation of the term system of emission reduction in Section 111. In every other rulemaking under Section 111(d), EPA looked at existing sources to see what technology and processes were in place to limit pollution. EPA then based its determination of the best system of emission reduction for those types of existing sources on the known and demonstrated technologies and processes that were in use. States then applied the system of emission reduction to existing sources within their borders that did not yet have these pollution controls, while taking into account several factors including the source's remaining useful life.

In this rulemaking, EPA turns this established procedure on its head and proposes for the first time a standard of performance that is based on not operating the source. EPA claims for the first time, based on the dictionary definition of the word "system," that it can regulate any set of things that leads to reduced emissions from the source category overall, even if those things go beyond the fence line of the plant. EPA's new interpretation is fundamentally flawed. A system of emission reduction must begin and end at the source itself. EPA's interpretation would allow the agency endless regulation over all manner of things that are completely outside its purview. To use an illustration that may help people better understand what EPA is proposing to do here, it is as if EPA were requiring car owners not only to have catalytic converters on their cars, but also to travel a certain amount of days per week by bus, purchase a certain number of electric vehicles, and work from home one day a week. All of these things would reduce overall car emissions, but they do nothing to reduce the rate at which those cars

emit pollutants per mile, and most people would surely agree that the Clean Air Act would not allow EPA to require these types of things from car owners, yet, this type of regulation is exactly what EPA is trying to do to power plants in the Section 111(d) rule.

Finally, it should be noted that litigation over this rule will absolutely occur when it is finalized. Unfortunately, litigation takes time, and states are going to be forced to act before courts determine whether the Section 111(d) rule is lawful. State plans must be submitted within 1 year after the rule is finalized, unless a partial plan is submitted and EPA grants an extension. These plans will be very complex, and states have never before had to submit a plan under Section 111(d) of this magnitude. Many states will need to pass legislation as part of their plan preparation. Regulations will need to be promulgated. Litigation will not be resolved before these things happen. Under this timing, any victory the states achieve will end up being hollow. A victory will not be able to give the states back the resources that were expended in plan development, nor will it solve the issue of states having to go through the time-consuming and uncertain process of unwinding legislation and regulations that were passed to put the plan in place.

Thank you again for the opportunity to testify today.
[The prepared statement of Ms. Wood follows:]

**Hearing on EPA's Proposed 111(d) Rule for Existing Power Plants:
Legal and Cost Issues**

Testimony of Allison Wood, Partner, Hunton & Williams LLP

**U.S. House Committee on Energy and Commerce
Subcommittee on Energy and Power**

March 17, 2015

Summary

Section 111(d) of the Clean Air Act has always been an insignificant provision designed to be used rarely. Indeed, it has been used only five times since 1970. EPA's proposed section 111(d) rule turns this notion on its head and seeks to regulate an enormous part of the economy. The rule suffers from numerous legal deficiencies, including whether EPA even has authority to issue it given that electric generating units are regulated under section 112 of the Clean Air Act. EPA agreed for many years that regulation under section 111(d) occurs only if the source category (rather than the pollutant) is not regulated under section 112. EPA now claims there is ambiguity in the statute due to a clerical error made in the Statutes at Large. EPA is incorrect.

The proposed rule is also unlawful because it attempts to redefine the statutory term "system of emission reduction" by relying on a dramatic redefinition of the word "system" to broaden the program beyond the source by claiming that it may base a standard of performance on any "set of things" that leads to reduced emissions from the source category overall. This is misguided. A "system of emission reduction" must begin and end at the source itself.

There are numerous other legal deficiencies with the proposed rule that will certainly be litigated. Given the complexity of this rule and the deadlines for state plans, however, states and regulated entities will be forced to comply with this rule long before courts decide the legal challenges. They are not going to be able to wait to see what happens in court, so under the current timing any victory that they achieve will end up being hollow.

**Hearing on EPA's Proposed 111(d) Rule for Existing Power Plants:
Legal and Cost Issues**

Testimony of Allison Wood, Partner, Hunton & Williams LLP

**U.S. House Committee on Energy and Commerce
Subcommittee on Energy and Power**

March 17, 2015

I. Introduction

It is an honor to appear before this Subcommittee to offer testimony on EPA's proposed rule to regulate existing electric generating units under section 111(d) of the Clean Air Act. My name is Allison Wood, and I am a partner in the law firm of Hunton & Williams LLP. I have practiced environmental law for over 16 years, and for the past decade my practice has focused almost exclusively on climate change. I have represented industry clients in every major rulemaking and case involving the regulation of greenhouse gases under the Clean Air Act, including preparing comments on EPA's proposed section 111(d) rule¹ for several clients, including the Utility Air Regulatory Group, and I represent that group in litigation pending before the D.C. Circuit regarding whether EPA has authority under the Clean Air Act to issue the section 111(d) rule. I am not representing anyone with regard to this testimony, however. I am testifying in my own personal capacity as a Clean Air Act practitioner who focuses on climate change.

EPA's proposed section 111(d) rule suffers from numerous legal deficiencies. I would like to briefly touch on two of those issues today. The first is whether EPA even has authority under section 111(d) to issue the proposed section 111(d) rule in light of the fact that electric generating units (which are sometimes referred to as "EGUs") are already regulated under

¹ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, 79 Fed. Reg. 34,830 (June 18, 2014).

section 112 of the Clean Air Act, which addresses hazardous air pollutants. The second issue is whether EPA's proposed section 111(d) rule can properly be considered to be a "system of emission reduction" under the Clean Air Act, even assuming EPA has authority to issue a section 111(d) rule for electric generating units. There are other legal defects in EPA's proposed section 111(d) rule, including numerous issues related to the Federal Power Act and the constitutional issues that Professor Tribe will be addressing today.

In addition, the Subcommittee should also be aware that a legal prerequisite for regulation under section 111(d) is that there must also be regulation of the same new sources under section 111(b). I will not get into them today, but there are many issues associated with EPA's proposed new source performance standards under section 111(b) for new coal-fired electric generating units, including the controversial requirement for partial carbon capture and sequestration. In the event those new source performance standards are overturned by a court, the foundation for EPA's section 111(d) rule would disappear.

All of these legal issues give rise to a great deal of uncertainty regarding the proposed section 111(d) rule and cast serious doubt over whether it will be able to survive review by the courts. In the meantime, however, states face deadlines for the submission of state plans and the owners of electric generating units have to begin preparing. They do not have the luxury of waiting to see whether these rules will make it through court review. In the last section of this testimony, I will address timing aspects of EPA's proposed section 111(d) rule and the impacts that are already being felt by states and regulated entities from the proposal.

II. EPA's Authority Under Section 111(d)

Section 111(d) has always been an insignificant provision of the Clean Air Act designed to be used rarely. Between 1970 and 1990, EPA issued regulations under this provision only

four times, regulating: (1) fluoride emissions from phosphate fertilizer plants;² (2) sulfuric acid mist from sulfuric acid production units;³ (3) total reduced sulfur emissions from kraft pulp mills;⁴ and (4) fluoride emissions from primary aluminum plants.⁵ After the 1990 amendments to the Clean Air Act, which further restricted section 111(d), only one section 111(d) regulation was promulgated that still exists. That regulation addresses landfill gas emissions from municipal solid waste landfills.⁶

EPA promulgated its regulations to implement section 111(d) in 1975, and those regulations have been changed only in minor ways since.⁷ At that time, the Agency explained that it planned to implement section 111(d) in a manner that would reflect the narrow, limited scope of the provision. Specifically, EPA noted that section 111(d) focuses on pollutants that are “highly localized and thus an extensive procedure ... is not justified.”⁸ In accordance with this well-understood, limited reach, the five existing source categories regulated to date under this provision have been singular and specialized. EPA provided that “the number of designated facilities per State should be few” and specifically said that state plans would be “much less complex than the [state implementation plans or “SIPs”]” issued under section 110 to ensure

² 42 Fed. Reg. 12,022 (Mar. 1, 1977).

³ 42 Fed. Reg. 55,796 (Oct. 18, 1977).

⁴ 44 Fed. Reg. 29,828 (May 22, 1979).

⁵ 45 Fed. Reg. 26,294 (Apr. 17, 1980).

⁶ 61 Fed. Reg. 9905 (Mar. 12, 1996). EPA also promulgated the Clean Air Mercury Rule under section 111(d), 70 Fed. Reg. 28,606 (May 18, 2005), but that rule was ultimately struck down by the D.C. Circuit on grounds unrelated to the issues being discussed here today, *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008).

⁷ 40 Fed. Reg. 53,340 (Nov. 17, 1975).

⁸ *Id.* at 53,342.

national ambient air quality standards are met.⁹ Thus, section 111(d) has always been understood by EPA to have limited reach. That reach became even more limited after the 1990 Amendments to the Clean Air Act.

In 1990, section 111(d) was amended to require the EPA Administrator to prescribe regulations for controlling pollution from “any existing source”:

- (i) for which air quality criteria have not been issued or which is *not* included on a list published under section [108(a)] of this title *or emitted from a source category which is regulated under section [112] of this title* but
- (ii) to which a standard of performance under this section would apply if such existing source were a new source....¹⁰

Before 1990, section 111(d) prevented EPA from regulating the emission of a *pollutant* from existing sources when that *pollutant* was regulated under section 112.¹¹ The purpose of this exclusion was to avoid duplicative regulation between section 111(d) and section 112.

Before the 1990 amendments to the Clean Air Act, section 112 focused on regulating hazardous air pollutants, which were defined to be pollutants not regulated under the national ambient air quality standards program and pollutants that could cause death or “serious irreversible, or incapacitating reversible, illness.”¹² In 1990, Congress decided to significantly expand the reach of section 112, listing 189 specific pollutants to be regulated under section 112 and allowing EPA to add pollutants to the list that more broadly present a threat to public health or that cause adverse environmental effects, provided the pollutant is not regulated under the

⁹ *Id.* at 53,345.

¹⁰ 42 U.S.C. § 7411(d)(1) (emphases added).

¹¹ 42 U.S.C. § 7411(d) (1989).

¹² Clear Air Amendments of 1970, Pub. L. No. 91-604, § 4(a), 84 Stat. 1676, 1685-86 (1970).

national ambient air quality standards program.¹³ Congress also provided, for the first time, that *source categories* would be listed and regulated with national emission standards under section 112.¹⁴ As EPA stated in litigation involving its 2005 Clean Air Mercury Rule, “the entire concept of ‘source categories’ in section 112 was new in 1990. Prior to 1990, section 112 simply directed EPA to develop a list of hazardous air pollutants and then to establish corresponding emission standards for these pollutants.”¹⁵ The focus of section 112 thus broadened significantly, and section 112 went from a section with just four subsections to one with nineteen.

The controversy over whether EPA has authority to issue the proposed section 111(d) rule or whether it is prohibited from doing so because electric generating units are a source category regulated under section 112 stems from two competing amendments that were made to section 111(d) in the spring of 1990, one by the House and one by the Senate. The Senate’s amendment was passed first and was non-substantive in nature. It was a conforming amendment to update a cross-reference to section 112 and retained the pre-1990 focus of section 111(d) on pollutants rather than source categories. The House amendment to section 111(d) was substantive in nature and passed nearly two months later.¹⁶ Both amendments appear in the Statutes at Large. Recognizing the mistake in the Statutes at Large, the codifiers included only

¹³ 42 U.S.C. § 7412(b)(2).

¹⁴ 42 U.S.C. § 7412(c), (d).

¹⁵ Final Brief of Respondent EPA, *New Jersey v. EPA*, No. 05-1097, 2007 WL 2155494, at 109 n.40 (D.C. Cir. July 23, 2007).

¹⁶ H.R. 3030 (containing the substantive provision) passed on May 23, 1990, while S. 1630 (containing the ministerial cross-reference) passed on April 3, 1990. See H.R. Rep. No. 101-490, at 444 (1990), *reprinted in* 2 A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1990 (“LEG. HISTORY”), at 3021, 3468 (1993) (report to accompany H.R. 3030); S. 1630, 101st Cong. § 305(a) (as passed by Senate, Apr. 3, 1990), *reprinted in* 3 LEG. HISTORY, at 4119, 4534.

the House amendment in the United States Code. This was appropriate given that the managers of the Senate bill *expressly* stated that they were deferring or “receding” to the substantive House amendment:

[T]he House amendment contains provisions for ... amending section 111 ... relating to new and existing stationary sources, for amending section 302 ... which contains definitions, to provide a savings clause, to state that reports that are to be submitted to Congress are not subject to judicial review, and for other purposes.

Conference agreement. *The Senate recedes to the House* except that with respect to the requirement regarding judicial review of reports, the House recedes to the Senate and with respect to transportation planning, the House recedes to the Senate with certain modifications.¹⁷

It was thus Congress’s clear and stated intent to do away with any language that interfered with House language on the same topic unless it was in the area of judicial review or transportation planning, and it was proper for the Senate amendment not to be included in the U.S. Code.

It made complete sense in 1990 to shift the focus of section 111(d) from pollutants to source categories when section 112 was expanded to focus on source categories. Quite simply, Congress amended section 111(d) to reflect what it had done with section 112. The House amendment’s focus on source categories aligns with the shift in focus in section 112 from pollutants to source categories. The Senate amendment’s focus on pollutants makes no sense in the context of the comprehensive amendments to section 112.

Although it takes a different approach now, EPA itself concluded in 1994 that the only logical reading of the 1990 amendments to section 111(d), especially in the context of the changes to section 112, is to honor the U.S. Code version containing the House amendment:

¹⁷ Chafee-Baucus Statement of Senate Managers, S. 1630, The Clean Air Act Amendments of 1990, § 108 (Oct. 27, 1990), *reprinted in* 1 LEG. HISTORY at 885 (1993) (emphasis added).

EPA also believes that [the House amendment] is the correct amendment because the Clean Air Act Amendments revised section 112 to include regulation of source categories in addition to regulation of listed hazardous air pollutants, and [the House amendment] thus conforms to other amendments of section 112. The section not adopted by title 42 [the Senate amendment], on the other hand, is a simple substitution of one subsection citation for another, without consideration of other amendments of the section in which it resides, section 112. Thus *EPA agrees that CAA section 111(d)(1)(A) should read “[t]he Administrator shall prescribe regulations which ... establish[] standards of performance for any existing source for any air pollutant ... which is not ... emitted from a source category which is regulated under section 112.”*¹⁸

Twenty years later, on June 2, 2014, EPA changed its position. In a Legal Memorandum that was issued along with the proposed section 111(d) rule, EPA concluded that it could regulate electric generating units under section 111(d) even though those units are source categories subject to regulation under section 112. Specifically, EPA stated that the two competing amendments to section 111(d) were “drafting errors” that create “ambiguity.”¹⁹ EPA says this “ambiguity” allows it to interpret section 111(d), which it has done in a way that adopts an even narrower limitation than either the Senate amendment or the House amendment. Under EPA’s interpretation, section 111(d) does not apply only when *both* the source category is regulated under section 112 *and* the pollutant in question is one listed under section 112.²⁰

EPA’s determination that it has the authority to regulate electric generating units under both section 111(d) and section 112 is particularly nonsensical when viewed in light of the

¹⁸ EPA, EPA-453/R-94-021, Air Emissions from Municipal Solid Waste Landfills – Background Information for Final Standards and Guidelines, at 1-5 to 1-6 (Dec. 1995), *available at* <http://www.epa.gov/ttn/atw/landfill/bidfl.pdf>.

¹⁹ Legal Memorandum for Proposed Carbon Pollution Emission Guidelines for Existing Electric Utility Generating Units at 12, 21(undated), *available at* <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-0419>.

²⁰ *Id.* at 26.

extensive, comprehensive, and expensive Maximum Achievable Control Technology that EPA has imposed on coal-fired electric generating units as part of its Mercury and Air Toxics Standards under section 112. EPA's proposed section 111(d) rule envisions shifting electric generation from coal-fired units to gas-fired units through environmentally-based dispatch of electricity, constructing and expanding low- or zero-carbon generating units (such as solar and wind generation) to replace fossil fuel-fired generation, and reducing electricity demand.²¹ It makes little sense to impose extremely costly maximum control technology requirements on existing electric generating units under section 112 and then turn around and tell those exact same sources that have already invested and installed those controls to cease or significantly reduce operations to comply with section 111(d) of the Clean Air Act, a provision that Congress clearly intended to be both insignificant and non-additive. Indeed, EPA estimates that the section 111(d) rule by itself (notwithstanding the Mercury and Air Toxics Standards under section 112) will cause 46 to 49 gigawatts of coal-fired capacity (as well as 16 gigawatts of oil/gas steam capacity) to retire by 2020 and will cost the electric utility industry another \$5.5 to \$7.5 billion annually to comply by 2020.²² This is exactly the type of duplicative regulation that Congress sought to avoid by making regulation of existing sources under section 111(d) and section 112 mutually exclusive.

The question of whether EPA has authority to issue the section 111(d) rule in light of the fact that electric generating units are subject to regulation under section 112 is currently pending before the D.C. Circuit in two related cases: *In re Murray Energy Corporation*, No. 14-1112 (consolidated with No. 14-1151), and *West Virginia v. EPA*, No. 14-1146. The court has scheduled oral argument in these two cases for April 16, 2015. The opening and reply briefs of

²¹ 79 Fed. Reg. at 34,836.

²² *Id.* at 34,933, 34,934.

West Virginia and 11 other states (Alabama, Indiana, Kansas, Kentucky, Louisiana, Nebraska, Ohio, Oklahoma, South Carolina, South Dakota, and Wyoming) in the *West Virginia* case are attached to this testimony as Attachment 1 because those briefs provide an excellent presentation of the legal arguments against EPA's interpretation of section 111(d). Those briefs also demonstrate the harm that states are suffering now as a result of the proposed section 111(d) rule. The opening and reply briefs of the Utility Air Regulatory Group (which I represent) and the National Federation of Independent Business in the *Murray Energy* case are also attached to this testimony as Attachment 2. Those briefs contain legislative history relevant to section 111(d) and provide a discussion of the harm that electric generating companies and their customers are experiencing as a result of the proposed section 111(d) rule.

III. EPA's Interpretation of "Best System of Emission Reduction" in the Proposed Section 111(d) Rule

The second legal issue I would like to address today is EPA's interpretation of the term "system of emission reduction" in section 111 of the Clean Air Act. Section 111(a)(1) of the Clean Air Act requires that any standard of performance, including one under section 111(d), be based on "the best system of emission reduction" that has been adequately demonstrated for the source category.²³ In its proposed section 111(d) rule, EPA relies on a dramatic redefinition of the statutory term "system" to broaden the scope of this program "beyond the source"²⁴ by claiming that it may base a standard of performance on any "set of things" that leads to reduced

²³ 42 U.S.C. § 7411(a)(1).

²⁴ EPA's "beyond the source" approach is often described as "beyond the fenceline." Although it is true that EPA cannot regulate "beyond the fenceline" under section 111, the term "beyond the source" is actually more precise in that section 111 is apparatus specific. For example, EPA's Subpart Da regulations (which are at issue here), 40 C.F.R. §§ 60.40Da-60.52Da, regulate the boiler of an electric generating unit and do not go beyond the boiler to other parts of the power plant. The phrase "beyond the fenceline" appears to allow regulation of other components within the power plant, which is not permissible under section 111 of the Clean Air Act.

emissions from the source category overall, ranging from utilization limits at certain units to enforceable obligations for other entities that reduce utilization of some sources.²⁵ This interpretation is misguided. The plain language, the statutory context, and the regulatory history of section 111 are unambiguous. A “system of emission reduction” must begin and end at the source itself.

To illustrate and better understand the problem with EPA’s overbroad interpretation of “system of emission reduction,” it helps to put it in the perspective of automobiles. Imagine that EPA proposes regulations under a section of the Clean Air Act authorizing the Agency to develop tailpipe emissions standards to reduce air pollution from cars. One might expect that these regulations would require vehicles to be equipped with emission control equipment (such as catalytic converters) or operational features (such as on-board diagnostic computers) to limit each vehicle’s tailpipe emissions per mile. But what if EPA went farther? Imagine that these regulations also attempted to reduce vehicle tailpipe emissions by requiring car owners to shift some of their travel to buses, or by requiring there to be more electric vehicle purchases, or by requiring individuals to reduce vehicle use altogether by working from home once a week. Can a “standard of performance” reasonably include measures like these on the basis that they are a “set of things” that lead to reduced emissions? Would the Clean Air Act allow it?

To many, such broad requirements would seem entirely out of place and beyond the scope of EPA’s authority to limit air pollution from cars, despite the fact that these types of measures would indirectly reduce tailpipe emissions from vehicles. That is because they would have no effect on the emissions rate of the individual vehicles themselves, and they are beyond the control of the vehicle manufacturer altogether. In order to require such measures, EPA

²⁵ 79 Fed. Reg. at 34,885-86.

would need authority to reach beyond the source—or, in this hypothetical, beyond the car—to impose obligations on other entities such as the car’s owner.

Although this imagined scenario seems fanciful, it is precisely what EPA proposes to do in the proposed section 111(d) rule. Rather than limit itself to emission control or other production process-related measures to lower the rate of carbon dioxide emissions from existing electric generating units, EPA instead proposes to require electricity generation to be shifted from coal- and oil-fired units to natural gas-fired units (akin to requiring car owners to take the bus more), mandate the building of additional renewable energy (akin to requiring the purchase of more electric vehicles), and require programs that will result in customers using less electricity (akin to requiring drivers to work from home one day a week). This approach violates common sense and the Clean Air Act.

Section 111 of the Clean Air Act authorizes EPA and states to promulgate standards of performance for new and existing sources within certain source categories. At its heart, section 111 is quite simple. It provides for the regulation of sources through standards that are based on what an individual source can do to reduce the source’s emissions at a given level of operation. Nothing in Building Blocks 2, 3, or 4 of EPA’s proposed section 111(d) rule would reduce the pounds per megawatt hour of carbon dioxide emitted from any electric generating unit. Those Buildings Blocks are all designed simply to make coal- and oil-fired units operate less (if at all). Efforts to require aggregate emission reductions by targeting entities outside the designated source category exceed the scope of this program; a “standard of performance” cannot ask another source to operate more (or other entities to reduce demand for a product) so that the source in the designated source category must curtail its operations or simply not “perform” at all.

A. Statutory Text

On its face, section 111 clearly does not authorize EPA or states to impose requirements that reach beyond individual sources in a regulated category. Instead, the statute provides only for standards that regulate the emissions performance of *individual* stationary sources. This narrow focus is evident simply from reading the titles used in these provisions: section 111 is designated “[s]tandards of performance for new stationary sources,” and section 111(d) is titled “[s]tandards of performance for existing sources; remaining useful life of source.” Likewise, the plain text of these provisions is clear that standards of performance apply only to sources in specific categories: new source performance standards under section 111(b) apply only to “new sources within [a listed] category,”²⁶ while state standards under section 111(d) apply to “any existing source . . . to which a standard of performance . . . would apply if such existing source were a new source.”²⁷ In addition, section 111(d) explicitly directs states and EPA to consider the “remaining useful life” of existing sources when applying any standard of performance, further demonstrating that this section focuses solely on what individual sources can do to improve their performance at reasonable cost rather than what the entire source category (or other entities) can do collectively.²⁸

The Clean Air Act also narrowly confines the stationary sources that may be regulated under section 111 to any individual “building, structure, facility, or installation which emits or may emit any air pollutant.”²⁹ This definition notably does not extend to combinations of these facilities or to other non-emitting entities. EPA has attempted in the past to treat multiple

²⁶ 42 U.S.C. § 7411(b)(1)(B).

²⁷ *Id.* § 7411(d)(1).

²⁸ *Id.* § 7411(d)(1)(B), (d)(2).

²⁹ *Id.* § 7411(a)(3).

individual sources as a single system subject to regulation for the purposes of section 111, only to be rebuked by the courts for violating the clear language of the statute.³⁰ For example, the D.C. Circuit has held that if EPA is concerned about the cost or need for flexibility in regulating a category of sources, the solution is to change the *standard*, not the entity to which the standard applies.³¹

Importantly, section 111 also requires that any standard of performance be “achievable” by the individual sources to which it applies based on application of an “adequately demonstrated” system of emission reduction.³² The achievability requirement is clearly inconsistent with a beyond the source approach. A standard cannot be “achievable” for a source if the source must rely on the conduct of some other entity that it does not control, or must simply not operate at all, in order to achieve the standard. The hypothetical automobile standard provides a telling example. If a standard of performance for tailpipe emissions from new motor vehicles were to be based on the emission reductions that would result from encouraging people to work from home one day a week, how would the manufacturer of any motor vehicle achieve that standard? No change in the design or operation of the vehicle could achieve those reductions. How would the owners of existing vehicles adjust the emissions performance of their cars? A source does not “achieve” a level of required performance by “performing” less or ceasing to “perform” at all.

B. Statutory Context

Further, nothing in the remainder of the Clean Air Act even hints that EPA has *any* authority under section 111 to impose beyond the source emission reduction measures. Other

³⁰ See *ASARCO Inc. v. EPA*, 578 F.2d 319 (D.C. Cir. 1978).

³¹ *Id.* at 329.

³² 42 U.S.C. § 7411(a)(1).

provisions of the Clean Air Act draw a sharp contrast between source-focused regulatory programs and programs that reduce aggregate emissions.

The Clean Air Act's other provisions establishing emission standards for new and existing sources all focus solely on achieving reductions in the rate of emissions at individual sources. Emission standards for hazardous air pollutants must be based on the maximum achievable control technology and reflect the application of "measures, processes, methods, systems or techniques" directly to individual sources.³³ Standards for visibility-impairing pollutants must reflect "the best available retrofit technology . . . for controlling emissions from [each eligible] source," considering the costs, existing control technology, and remaining useful life for that source.³⁴ And under the Clean Air Act's program for prevention of significant deterioration, new and modified sources must implement the "best available control technology" (or "BACT"), which the permitting authority must identify on a case-by-case basis for each source and which must reflect "application of production processes and available methods, systems, and techniques" at the source.³⁵ None of these programs allows EPA to set an emission standard based on capping or restricting a source's operations.

The BACT program is particularly relevant because Congress explicitly tied these emission standards to section 111. Standards of performance under section 111 provide a regulatory floor for BACT standards.³⁶ But if a standard of performance relies on a "system of emission reduction" that goes beyond the source itself, it cannot meaningfully inform a BACT standard for individual sources in that category.

³³ *Id.* § 7412(d)(2) (listing acceptable measures).

³⁴ *Id.* § 7491(b)(2)(A).

³⁵ *Id.* §§ 7475(a)(4), 7479(3).

³⁶ *Id.* § 7479(3).

In contrast, in the few regulatory programs where Congress did authorize broad emission control measures for the purpose of meeting aggregate emission reduction goals, it spoke clearly and precisely. When Congress took action in the 1990 Clean Air Act Amendments to cap acid rain-forming emissions and establish a program for emissions allowances and trading, it added an entirely new title (Title IV) to the Clean Air Act spelling out the requirements and implementation procedures for that program in great detail.³⁷ Unlike the portion of the Clean Air Act in which section 111 is found, Congress's statement of purpose in Title IV establishes clear goals for nationwide "reductions in annual emissions" and explicitly states its desire to "encourage energy conservation, use of renewable and clean alternative technologies, and pollution prevention as a long-range strategy, consistent with the provisions of this subchapter, for reducing air pollution."³⁸ Congress also gave EPA specific instructions on how to credit sources for compliance with emission requirements based on avoided emissions from renewable energy and energy conservation.³⁹ The exhaustive provisions in Title IV prove that when Congress intends to establish a program requiring aggregate emission reductions that reaches beyond measures implemented at individual sources, it does not hide such authority in general terms like "system of emission reduction."

C. Regulatory History

Even if the statutory language left any doubt, EPA's long and consistent history of implementing section 111 at the source would give lie to today's novel attempts to extend that section beyond the source. In fact, to the best of my knowledge, in the 44-year history of the

³⁷ See *id.* §§ 7651-7651o.

³⁸ *Id.* § 7651(b).

³⁹ *Id.* § 7651c(f).

Clean Air Act, EPA has limited the scope of section 111 to the emission rate improvements at the regulated source in *every rulemaking it has undertaken*.

First, EPA's 1975 Subpart B regulations—which establish a procedural framework for states to adopt standards of performance for existing sources under section 111(d)—share section 111's exclusive focus on standards that are achievable by individual sources. Subpart B directs EPA to publish a “guideline document containing information pertinent to control of the designated pollutant [from] *designated facilities* [i.e., existing sources subject to regulation under 111(d)].”⁴⁰ Echoing the statutory text, emission guidelines under Subpart B must “reflect[] the application of the best system of emission reduction (considering the cost of such reduction) that has been adequately demonstrated *for designated facilities*.”⁴¹ Acknowledging section 111's statutory command to consider the “remaining useful life” of regulated existing sources, Subpart B also notes that states may tailor standards of performance for individual designated facilities to account for “[u]nreasonable cost of control resulting from plant age, location, or basic process design,” “[p]hysical impossibility of installing necessary control equipment,” or “[o]ther factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.”⁴² This discretion reflects Subpart B's focus on what emission rate improvements individual existing sources can achieve themselves.

Subpart B also specifies that compliance with any standards of performance for existing sources will be shown through a series of “[i]ncrements of progress,” which are “steps to achieve compliance which must be taken by an owner or operator of a designated facility.”⁴³ These

⁴⁰ 40 C.F.R. § 60.22(a) (emphasis added).

⁴¹ *Id.* § 60.22(b)(5) (emphasis added).

⁴² *Id.* § 60.24(f).

⁴³ *Id.* § 60.21(h).

increments of progress include awarding contracts, initiating on-site construction or installation, and completing on-site construction or installation of emission control equipment or process changes.⁴⁴ Thus, Subpart B makes clear that compliance with standards of performance is achieved through on-site measures taken by regulated sources.

Second, out of the nearly 100 new source performance standards and emission guidelines EPA has promulgated and subsequently revised since 1970, to the best of my knowledge, *not one* has included beyond the source measures as part of a “system of emission reduction.” For example, when the Agency promulgated and later revised the new source performance standards for kraft pulp mills, it never considered basing the standard of performance on measures that indirectly reduce those sources’ operations by reducing demand for paper, such as promoting double-sided printing or encouraging businesses to provide “paperless billing” for customers.⁴⁵ EPA’s source-focused approach has not changed from 1970 to the present. In a June 30, 2014 new source performance standard rulemaking, EPA reaffirmed that standards of performance “apply to sources” and must be “based on the [best system of emission reduction] *achievable at that source*.”⁴⁶

Nor has EPA ever taken a beyond the source approach in emission guidelines for existing sources. As discussed above, since 1970, EPA has only published valid emission guidelines under section 111(d) for five source categories, and in all five of these rulemakings the emission guidelines were based on the application of pollution control technology or other process

⁴⁴ *Id.* § 60.21(h)(1)-(5).

⁴⁵ See 43 Fed. Reg. 7568, 7572 (Feb. 23, 1978); 79 Fed. Reg. 18,952 (Apr. 4, 2014).

⁴⁶ 79 Fed. Reg. 36,880, 36,885 (June 30, 2014) (emphasis added).

controls at individual sources.⁴⁷ The Clean Air Mercury Rule, which was promulgated under section 111(d), also did not adopt a beyond the source approach to establishing standards of performance. Although that rule did authorize an emissions trading program as a tool for *compliance* with standards of performance, the “system of emission reduction” that was used to set the emission guidelines themselves was limited to pollution control technology that could be installed at individual sources.⁴⁸

In light of this statutory language, context, and regulatory background, the beyond the source approach contained in EPA’s proposed section 111(d) rule clearly conflicts with section 111 of the Clean Air Act. Just as the Clean Air Act does not authorize EPA to require drivers to stay home or to use public transportation in order to reduce motor vehicles’ tailpipe emissions, the Agency cannot require stationary source owners to operate their sources less or to rely on other measures outside of their control as part of a standard of performance. In the context of existing electric generating units, this means that any final carbon dioxide emission guidelines EPA ultimately promulgates (assuming it has authority to do so) may be based only on measures that electric generating unit owners may incorporate into the design or operation of their units themselves, such as improvements in heat transfer efficiency. Although this may result in lower

⁴⁷ 41 Fed. Reg. 19,585 (May 12, 1976) (draft guidelines for phosphate fertilizer plants based on “spray cross-flow packed scrubbers”); 41 Fed. Reg. 48,706 (Nov. 4, 1976) (proposed guidelines for sulfuric acid production units based on “fiber mist eliminators”); 43 Fed. Reg. 7597 (Feb. 23, 1978) (draft guidelines for kraft pulp mills based on various process controls and two-stage black liquor oxidation system); 45 Fed. Reg. at 26,294 (final guidelines for primary aluminum plants based on “effective collection of emissions followed by efficient fluoride removal by dry scrubbers or by wet scrubbers”); 61 Fed. Reg. at 9907 (final guidelines for municipal solid waste landfills based on “(1) [a] well-designed and well-operated gas collection system and (2) a control device capable of reducing [non-methane organic compounds] in the collected gas by 98 weight-percent”).

⁴⁸ 70 Fed. Reg. at 28,617-20, 28,621 (final guideline was “based on the level of [mercury (Hg)] emissions reductions that will be achievable by the combined use of co-benefit (CAIR) and Hg-specific controls”).

overall emission reductions than a beyond the source approach, it is the outcome that the Clean Air Act requires. As the Supreme Court recently held in striking down a major component of EPA's prevention of significant deterioration permitting program for greenhouse gases, "[a]n agency has no power to 'tailor' legislation to bureaucratic policy goals by rewriting unambiguous statutory terms."⁴⁹ Because section 111 focuses solely on standards that are achievable by individual sources, EPA's standards of performance must as well.

IV. Timeline for State Plans Under EPA's Proposed Section 111(d) Rule

EPA has stated that it will finalize its section 111(d) rule this summer. States will then have one year, until the summer of 2016, to finalize their state plans. Although states may submit partial state plans at the one-year deadline and seek an extension, the state needs to show significant progress on its plan, and there is no guarantee that an extension would be granted and that a federal plan would not be imposed on the state. The compliance period for the section 111(d) rule was originally supposed to begin on January 1, 2020, but EPA has announced that it now intends for the compliance period to begin in summer 2020. State plans will be submitted well in advance of the beginning of the compliance period.

The plans that states will need to prepare are extremely complicated. In the *West Virginia* litigation, for example, the State of Alabama described preparation of the plan that will be needed for the section 111(d) rule as "the most complex air pollution rulemaking undertaken by [Alabama] in the last 40 years."⁵⁰ The rule essentially requires a complete overhaul of each state's energy portfolio. In addition, many states are going to have to enact laws and regulations to enable them to do the things contemplated by the proposed rule. All of this will be completed

⁴⁹ *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2445 (2014).

⁵⁰ Final Brief for Petitioners, Exhibit A, *West Virginia v. EPA*, No. 14-1146 (D.C. Cir. Mar. 4, 2015) (Attachment 1 to this testimony).

before litigation over the rule is complete. If the rule is ultimately held to be unlawful, the states will have already expended enormous amounts of resources to develop the plan, and any laws or regulations that have been enacted cannot be easily reversed.

Similarly, the owners of electric generating units are having to plan now to comply with the rule—even as significant uncertainty surrounding the legality, parameters, and stringency of state plans puts the industry's long-term planning in limbo. Important decisions, such as whether to make improvements or to install emission control equipment on certain power plants, are suspended because it is uncertain whether those plants will remain operational after this rule goes into effect. Companies are also reluctant to enter into long-term contracts for power or fuel during the pendency of the rulemaking and the state planning process, which can add costs that are being passed on to consumers. If companies are going to need to increase their renewable generation in order to meet customer demand, then decisions need to be made now regarding the timing of that construction. Decisions will need to be made about plant closures, and once these decisions have been made, they are not easily reversed.

As discussed earlier, there are myriad legal issues regarding the section 111(d) rule, and while the outcome of litigation is uncertain, the fact that it will occur is certain. Unless the rule is stayed by the court during litigation—which is highly unusual and cannot be counted on—states and the owners of electric generating units will have no choice but to proceed. This could lead to a situation where a victory in litigation could ring very hollow because so much of the injury to states and electric generating unit owners will have already occurred and will not be able to be remedied.

Indeed, this situation has happened with EPA's Mercury and Air Toxics Standards. The Supreme Court is hearing oral argument to determine whether that rule is unlawful next week.

In the meantime, most electric generating units subject to that rule have installed controls already to comply with it. A victory in the Supreme Court will not be able to give those companies back the money that has been spent to install those controls, and in some circumstances might even threaten the ability of the utility to recover those costs because they could be deemed to have been unnecessary.

V. Conclusion

EPA's proposed section 111(d) rule suffers from many legal infirmities and violates the Clean Air Act. I touched on just two of those legal issues today that should prove fatal to the rule, but there are many more. The problem is that the court process is going to take time to play out, and in the meantime, states and regulated entities are going to have to begin the process of figuring out how to comply with this rule—even if they believe as I do that the rule is unlawful. Because of the complexity of the rule and the enormous ramifications it has for how energy is distributed in each state, the ability to wait and see what happens in court is not a realistic option.

Thank you again for the opportunity to testify today.

Mr. WHITFIELD. Thank you, Ms. Wood.

At this time, our third witness is Professor Richard Revesz, who is the Lawrence King Professor of Law, Dean Emeritus, Director of Institute for Policy Integrity at the New York University School of Law. And thank you very much for being with us today, Professor, and you are recognized for 5 minutes.

STATEMENT OF RICHARD L. REVESZ

Mr. REVESZ. Thank you, Mr. Chairman, and thank you for inviting me to testify before the committee.

My written testimony covers four main points. First, the Clean Power Plan is a natural extension of previous EPA policies stretching back decades, and promulgated under both Republican and Democratic administrations, that use flexible compliance mechanisms to address the environmental harms of power production. Second, the Clean Power Plan does not give rise to any constitutional problems. Third, EPA has clear authority to implement the Clean Power Plan under Section 111(d) of the Clean Air Act. And fourth, EPA's proposed guidelines in Section 111(d) are authorized by the statute and based upon demonstrated approaches that some utilities and states have already taken to reduce greenhouse gas emissions.

On the first point, for the past quarter of a century, each President has taken measures to regulate the emissions of existing power plants because they are the Nation's largest sources of many harmful air pollutants, including mercury, sulfur dioxide, and carbon dioxide. Under the Administration of President George H. W. Bush, Congress enacted a 1990 amendment which capped sulfur dioxide emissions from existing power plants, and established an innovative trade mechanism to achieve reductions as cheaply as possible. Later, the Administrations of President Bill Clinton, George W. Bush, and Barack Obama each promulgated important regulations requiring existing power plants to reduce emissions of smog and particulate precursors that negatively affect the air quality in downwind states, again using cost-effective flexible trading mechanisms. And finally, the Administrations of both President George W. Bush and Barack Obama issued rules limiting emissions of mercury from existing plants.

Like these earlier programs, EPA's Clean Power Plan will cost-effectively reduce pollution from existing power plants through a flexible program that enables states to rely on traditional regulation, emissions trading, or any other tool that they may prefer.

My second point on the constitutional issues. The first claim made by opponents is there is a problem with the way Congress delegated regulatory power to EPA under Section 111(d) because the House and Senate passed arguably inconsistent amendments to the provision in 1990. Both the House and Senate versions were then included in a conference bill that was passed by each chamber and signed by President George H. W. Bush. In all of our history, the Supreme Court has struck down only two statutory provisions as constitutionally impermissible delegations to an administrative agency, both in the mid-1930's, during its skirmishes with President Franklin Roosevelt over the New Deal. Supreme Court has never invalidated a federal statute on non-delegation grounds on the

basis of the argument that opponents of the Clean Power Plan now advance: that a statute has arguably inconsistent provisions. Instead, the courts have consistently dealt with this problem by finding ways to develop a workable interpretation of the statute.

Opponents of the Clean Power Plan make a similarly farfetched argument the plan violates the Takings Clause of the Fifth Amendment, which protects private property rights. A regulation leads to a Takings violation only if it deprives an owner of essentially all of the value of his or her property, which is not the case here. And even if it were, the appropriate remedy is a subsequent suit for compensation, not the invalidation of a nationwide rule.

Finally, opponents claim that the Clean Power Plan runs afoul of the Tenth Amendment's prohibition against the commandeering of state institutions by the Federal Government. This extreme and unsupported interpretation of the Tenth Amendment would invalidate many of the core provisions of the Clean Air Act, not only Section 111(d), in fact, it is the basis for how the National Ambient Air Quality Standards under the Clean Air Act, which are the centerpiece of the statute, and have been its centerpiece since 1970, are administered. And nothing here is commandeered anyway. The states are merely given the option to submit plans if they choose to do so. If they do not, the Federal Government has the authority to impose federal implementation plans that give rise to no constitutional problem at all because they do not involve state institutions.

The third point, the statutory point. Congress passed two amendments: the House Amendment and the Senate Amendment. The opponents of the Clean Power Plan would like us to ignore the Senate Amendment because it was not included in the U.S. Code by the Office of Law Revision Counsel, but everyone knows that a mere functionary cannot supplant the will of Congress. To do so would violate the principles of bicameralism and presentment. And in any event, even the House Amendment, which the opponents of the Clean Power Plan would like to credit, is not subject to a single interpretation; it is subject to multiple interpretations, and under traditional principles of statutory construction, the interpretation by the agency, by EPA, is entitled to deference in the courts.

And finally, on the claim that the Clean Power Plan violates some provision of the Clean Air Act because it regulates beyond the fence line, the product here is electricity, not electricity produced by coal, and EPA has the authority to define the system in that way, and has done so.

Thank you very much, and I would be delighted to answer questions.

[The prepared statement of Mr. Revesz follows:]

Testimony of Richard Revesz
Lawrence King Professor of Law and Dean Emeritus
New York University School of Law
Before the Subcommittee on Energy and Power
House Committee on Energy and Commerce
March 17, 2015

Introduction

Good morning and thank you for inviting me to testify before this subcommittee. I am Richard Revesz, the Lawrence King Professor of Law and Dean Emeritus at New York University School of Law. At NYU Law School, I also serve as the Director of the Institute for Policy Integrity, a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. In addition, I am the Director of the American Law Institute, the leading independent organization in the United States producing scholarly work to clarify, modernize, and otherwise improve the law. The views I express today are my own and do not represent the views, if any, of New York University or the American Law Institute.

I have written eight books and more than 70 articles and book chapters on environmental law, administrative law, and regulatory policy, and have twice won the American Bar Association's yearly award for the best article or book in the areas of administrative law and regulatory practice. In particular, my recent work has focused on the Clean Air Act and on the regulation of greenhouse gases. Over the course of the last year, I published "Rethinking Health-Based Environmental Standards" in the *NYU Law Review* (co-authored with Michael Livermore), which focuses on the setting of National Ambient Air Quality Standards under the Clean Air Act, and an article in *Nature* (co-authored with Nobel Prize winner Kenneth Arrow

and other leading economists, climate scientists and legal scholars), which analyzes the models used to evaluate the damages from greenhouse gas emissions. My forthcoming article, "Toward a More Rational Environmental Policy," in the *Harvard Environmental Law Review*, focuses on the two Clean Air Act cases that the Supreme Court of the United States decided last spring.

I am also a public member of the Administrative Conference of the United States and have served on the Science Advisory Board of the U.S. Environmental Protection Agency and on committees of the National Academy of Sciences and the National Research Council.

My testimony before this subcommittee explains that EPA's Clean Power Plan is well justified under the Clean Air Act and the Constitution and is consistent with over thirty years of regulatory practice, under administrations of both political parties.

Summary

EPA's flexible, cost-minimizing approach is consistent with the law and with over thirty years of EPA Clean Air Act practice, under administrations of both political parties. The Clean Power Plan is not, as its opponents argue, an unprecedented approach that risks economic calamity; instead, it is just another example of EPA doing its job to ensure that polluters account for the cost of their pollution in a manner that will result in substantial net economic benefits to the public.

My testimony covers four main topics:

- (1) The Clean Power is a natural extension of previous EPA policies—stretching back decades and promulgated under both Republican and Democratic administrations—that used flexible compliance mechanisms to address the environmental harms of power production;
- (2) The Clean Power Plan does not give rise to any constitutional problems;
- (3) EPA has clear authority to implement the Clean Power Plan under Section 111(d) of the Clean Air Act; and
- (4) EPA's proposed guidelines under Section 111(d) are authorized by the statute and based upon demonstrated approaches that some utilities and states have already taken to reduce greenhouse gas emissions.

I. EPA's Clean Power Plan, Like Regulations from Prior Presidents of Both Parties, Stretching Back Decades, Uses Flexible Mechanisms to Ensure that Polluters Address Their Environmental Harms, While Minimizing Compliance Costs

Opponents of the Clean Power Plan argue that the Obama administration's proposal represents a drastic change from the policies of previous Democratic and Republican Administrations. This assertion is flatly wrong. For the past quarter of a century, each president, Democratic and Republican, has taken measures to regulate the emissions of existing power plants because they are the nation's largest sources of many harmful air pollutants, including mercury, which adversely affects the nervous system; sulfur dioxide, which forms deadly particulates and causes environmental harm in the form of acid rain; and carbon dioxide, which causes climate change.

Under the George H.W. Bush administration, Congress enacted the 1990 amendments to the Clean Air Act, which capped sulfur dioxide emissions from existing power plants and established an innovative emissions trading program to ensure that reductions could be achieved as cheaply as possible. Later, the administrations of Bill Clinton, George W. Bush, and Barack Obama each promulgated important regulations requiring existing power plants to reduce emissions of smog and particulate precursors that negatively affect air quality in downwind states, again using cost-effective, flexible trading mechanisms.¹ (Last year, the Supreme Court upheld the most recent of these interstate pollution rules in *EPA v. EME Homer City Generation*.²) And finally, both the George W. Bush and Obama administrations issued rules limiting emissions of mercury from existing power plants.³ (The former rule was struck down because it had relied on the wrong section of the Clean Air Act.⁴) As in the case of all these earlier programs, EPA's Clean Power Plan will cost-effectively reduce carbon pollution from existing power plants through a flexible program that enables states to rely on traditional regulation, emissions trading, or any other tool they prefer.

Like the prior regulations of existing power plants, the Clean Power Plan reflects the fact that the pollution produced by coal is so much greater than that from readily available, cleaner sources of energy. But one of the main challenges coal now faces is wholly unrelated to policies of the Obama administration. It is the

¹ 63 Fed. Reg. 57,356, 57,376 (Oct. 27, 1998); 70 Fed. Reg. 25,162, 25,174 (May 12, 2005); 76 Fed. Reg. 48,208 (Aug. 8, 2011).

² 134 S. Ct. 1584 (2014).

³ 70 Fed. Reg. 28,606 (May 18, 2005); 77 Fed. Reg. 9304 (Feb. 16, 2012).

⁴ See *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008).

record-low price of natural gas, which stems from improvements in hydraulic fracturing technologies and the discovery of significant reserves—developments that Clean Power Plan opponents overlook, presumably because they do not fit their narrative.

II. EPA's Clean Power Plan Passes Constitutional Muster

Some opponents of the Clean Power Plan have argued that it gives rise to constitutional problems. That is simply not the case. Opponents raise three constitutional arguments, none of which is even remotely plausible.

Their first claim is that there is a problem with the way Congress delegated regulatory power to the EPA in Section 111(d), because the House and Senate passed arguably inconsistent amendments to the provision in 1990. Both the House and Senate versions were then included in a conference bill passed by each chamber and signed by President George H.W. Bush.

In all of our history, the Supreme Court has struck down only two statutory provisions as constitutionally impermissible delegations to an administrative agency,⁵ both in the mid-1930s, during its skirmishes with President Franklin Roosevelt over the New Deal. Moreover, the Supreme Court unanimously rejected this constitutional claim against Clean Air Act standards in *Whitman v. American Trucking Associations*.⁶

⁵ *Panama Refining Co. v. Ryan*, 293 U.S. 388 (1935) (striking down portions of the 1933 National Industrial Recovery Act); *A.L.A. Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935) (same); *Carter v. Carter Coal Co.*, 298 U.S. 238 (1936) (striking down portions of the Bituminous Coal Conservation Act).

⁶ 531 U.S. 457 (2001).

The Supreme Court has never invalidated a federal statute on nondelegation grounds on the basis of the argument that the opponents of the Clean Power Plan now advance: that a statute has arguably inconsistent provisions. The courts have consistently dealt with this problem by finding ways to develop a workable interpretation of the statute. In fact, giving meaning to seemingly inconsistent provisions in federal statutes is an important part of the work of the federal courts, and tools of statutory interpretation, rather than the Constitution, are the way all of those cases get resolved. Furthermore, as explained below, the premise of this dubious constitutional argument—that one of the two statutory amendments would, standing alone, forbid EPA from regulating carbon dioxide—is itself unfounded, and contrary to the positions of every presidential administration since 1990.

Opponents of the Clean Power Plan make a similarly farfetched argument that the Clean Power Plan violates the Takings Clause of the Fifth Amendment, which protects private property rights. A regulation leads to a takings violation only if it deprives an owner of essentially all of the value of his or her property, which is not the case here. And even if a particular firm had a plausible takings challenge, the remedy would not be to invalidate a nationwide regulation. Instead, the aggrieved firm would have the right to pursue a subsequent action for compensation.

Finally, opponents claim that the Clean Power Plan runs afoul of the Tenth Amendment's prohibition against the commandeering of state institutions by the federal government. This extreme and unsupported interpretation of the Tenth Amendment would invalidate many of the core provisions of the Clean Air Act, not only Section 111(d), on which the Clean Power Plan rests. The standard approach of

the Clean Air Act is for the federal government to establish statewide pollution reduction requirements and for the states then to choose how to allocate the burden of this reduction among sources in their respective jurisdictions. If a state declines to take action, the federal government imposes requirements directly on polluters within the state. As a result, no state institution is commandeered.

The states are given the option of allocating the pollution burden among polluters themselves so that a state plan can reflect that state's own environmental and economic preferences and can allocate the pollution reduction burden in the manner that the state deems most desirable. If states choose not to exercise this option, EPA promulgates a federal implementation plan, which it clearly has the constitutional power to do, and which does not raise any Tenth Amendment problem, because it does not impose any requirements on state institutions.

That, for example, is the approach under the National Ambient Air Quality Standards, which are the Clean Air Act's centerpiece. The Clean Power Plan is not like the requirement invalidated in *New York v. United States*,⁷ under which states had either to take title to nuclear waste or to enact particular regulations. Nothing at all is required of the states under the Clean Power Plan; they are just given an option to tailor an implementation plan suited to their unique needs and preferences. Neither does the Clean Power Plan give rise to a situation like that in *National Federation of Independent Business v. Sebelius*, the first Supreme Court review of the Affordable Care Act.⁸ There, the Court deemed the Act's requirement that states either expand Medicaid or lose *all* federal Medicaid funding "so coercive as to pass

⁷ 505 U.S. 144 (1992).

⁸ 132 S. Ct. 2566 (2012).

the point at which ‘pressure turns into compulsion.’”⁹ In the case of the Clean Power Plan, a few states have already indicated that they may not prepare state implementation plans, thereby accepting the reality that they will be subject to a federal implementation plan. Whatever else might be at issue here, it is definitely not “compulsion.”

Instead, the Clean Power Plan is a run-of-the-mill example of the cooperative federalism that is common under the Clean Air Act and that is totally unproblematic. The Clean Power Plan is not some unconstitutional invention of the Obama administration.

III. EPA Has Authority to Promulgate the Clean Power Plan Under Section 111(d) of the Clean Air Act

The Clean Power Plan is an entirely permissible use of EPA’s authority under Section 111(d) of the Clean Air Act. Section 111(d) presents an unusual situation because, in the 1990 amendments to the Clean Air Act, the House and the Senate passed arguably different versions of the provision, and the two versions were never reconciled in conference.¹⁰ As I already indicated, both provisions were then approved by both chambers and signed by the President. However, since the passage of the 1990 Amendments, and through administrations of both parties, EPA has repeatedly interpreted Section 111(d) in ways that are consistent with its authority to promulgate the Clean Power Plan.

⁹ *Id.* at 2604.

¹⁰ Pub. L. No. 101-549, § 108(g), 104 Stat. 2399, 2467 (1990) (House amendment); Pub. L. No. 101-549, § 302(a), 104 Stat. at 2574 (Senate amendment).

Opponents of the Clean Power Plan argue that because the House version of the provision was transcribed into the U.S. Code, that version should govern. However, it is well established that when the Statutes at Large and the U.S. Code conflict, the text in the Statutes at Large controls (unless the U.S. Code itself is adopted as legislation, which not the case here).¹¹ Because both the Senate amendment and the House amendment appear in the Statutes at Large, an interpretation of Section 111(d) must try to give effect to both.

And, indeed, EPA has repeatedly—under administrations of both parties—read Section 111(d) to give effect to both the Senate and House amendments. The difference between the two amendments concerns the extent to which a source is excluded from Section 111(d) regulation when it is already regulated under Section 112 for emitting hazardous air pollutants. EPA has consistently construed this Section 112 exclusion in Section 111(d) to pertain to air pollutants, not entire source categories.¹² In particular, EPA has interpreted the Section 112 exclusion to

¹¹ See *Stephan v. United States*, 319 U.S. 423, 426 (1943) (“[T]he Code cannot prevail over the Statutes at Large when the two are inconsistent”); *Five Flags Pipe Line Co. v. Dep’t of Transp.*, 854 F.2d 1438, 1440 (D.C. Cir. 1988) (“[W]here the language of the Statutes at Large conflicts with the language in the United States Code that has not been enacted into positive law, the language of the Statutes at Large controls.”). The Statutes at Large trump the U.S. Code until Congress has enacted the title at issue into positive law, which has not occurred for Title 42.

¹² See 56 Fed. Reg. 24,468, 24,469 (proposed May 30, 1991) (determining that the Section 112 Exclusion applies to particular pollutants—namely those deemed “hazardous” under Section 112—rather than entire source categories); 63 Fed. Reg. 18,504 (Apr. 15, 1998) (issuing hazardous air pollutant standards under Section 112 for pulp and paper producers, including Kraft pulp mills); 64 Fed. Reg. 59,718 (Nov. 3, 1999) (approving Maryland’s 111(d) state air quality plan for total reduced sulfur emissions from existing Kraft pulp mills, even though Section 112 standards already applied to Kraft pulp mills); 65 Fed. Reg. 66,672, 66,674-75 (proposed Nov. 7, 2000) (indicating that EPA would be permitted to simultaneously regulate landfill gas under both Section 111(d) and Section 112); 68 Fed. Reg. 23,209 (May 1, 2003) (approving Maine’s 111(d) state air quality plan for total reduced sulfur emissions from existing Kraft pulp mills, even though Section 112 standards already applied to Kraft pulp mills); 68 Fed. Reg. 2227, 2229 (Jan. 16, 2003) (indicating that Section 111(d) emissions guidelines would continue operating for landfill gases despite Section 112 standards being enacted); 68 Fed. Reg. 74,868, 74,868 (Dec. 29, 2003) (approving Pennsylvania’s 111(d) state air quality plan for total reduced sulfur emissions from existing municipal solid waste landfills, even though Section

apply to listed hazardous air pollutants that are emitted from source categories actually regulated under Section 112, so that the same pollutants from the same source cannot be regulated under both Section 112 and 111(d).¹³ In other words, if EPA has already used Section 112 to regulate emissions of Pollutant A from Source Category X, it cannot *also* regulate emissions of Pollutant A under Section 111(d). It can, however, use Section 111(d) to regulate emissions of some *other* pollutant from Source Category X. In fact, the opposite interpretation would provide a sweeping exclusion for large categories of harmful air pollutants.

Opponents of the Clean Power Plan agreed wholeheartedly with EPA's longstanding interpretation when the agency, under President George W. Bush, described its approach to the conflicting amendments in a 2005 rule regarding mercury emissions from power plants.¹⁴ These opponents now maintain, however, that because EPA has already regulated power plants' mercury emission under Section 112, it cannot regulate those same plants' emissions of any other pollutant—including carbon dioxide, the subject of the Clean Power Plan—under Section 111(d).

112 standards already applied to municipal solid waste landfills); 77 Fed. Reg. 9304, 9447 (Feb. 16, 2012) ("Designated pollutant means any air pollutant, the emissions of which are subject to a standard of performance for new stationary sources, but for which air quality criteria have not been issued and that is not included on a list" published under Section 108 or Section 112.)

¹³ 70 Fed. Reg. 15,994, 16,031-32 (Mar. 29, 2005); EPA, Legal Memorandum for Proposed Carbon Pollution Emission Guidelines for Existing Electric Utility Generating Units 26 (2014), <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602-legalmemorandum.pdf> (proposed interpretation for Clean Power Plan).

¹⁴ Joint Br. of State Respondent-Intervenors et al. [including eight petitioners in the currently pending challenges to the Clean Power Plan in the D.C. Circuit] at 25, *New Jersey v. EPA*, 517 F.3d 574 (2008) (Nos. 05-1097 et al.) (supporting EPA's "reasoned way to reconcile the conflicting language" in the House and Senate Amendments and arguing that the "Court should defer to EPA's interpretation").

In order to reach their new conclusion that EPA lacks authority to promulgate the Clean Power Plan, opponents must, among other argumentative leaps, completely disregard the Senate's amendment and rely on the administrative decision of a staff member in the Office of Law Revision Counsel to include just the House amendment in the U.S. Code. But this staff member cannot supplant the will of Congress. In fact, adopting the approach urged by the opponents of the Clean Power Plan would lead to a serious constitutional problem. Law would be made without following the constitutional requirements of bicameralism (passage by both the House and the Senate) and presentment (signature by the President or veto override by Congress). The Supreme Court has made clear in *Immigration & Naturalization Service v. Chadha* that such arrangements are unconstitutional.¹⁵ And even if one got past that problem, one would need to argue that the House amendment is subject to a single meaning and deprive EPA of the deference that it is owed under the *Chevron* doctrine when it interprets ambiguous statutory provisions. In fact, reasonable interpretations of the House amendment would support the Clean Power Plan.

IV. EPA's Proposed Guidelines Under Section 111(d) Are Consistent with the Statute

Opponents of the Clean Power Plan also argue that EPA cannot account for the full range of emissions reduction possibilities that are actually available in a

¹⁵ 462 U.S. 919 (1983).

state, claiming that the agency must arbitrarily limit its analysis to reductions that are achievable within the “fence line” of individual power plants¹⁶

It is first important to note that the Clean Power Plan does not require any state or any power plant to undertake any particular approach to reducing carbon emissions. As an initial matter, all the plan does is set carbon emissions targets for a state, which the state then has the discretion to decide how to meet.¹⁷ So the plan does not require any power plant to reduce emissions that it cannot control.

Furthermore, EPA has broad authority to tailor the emissions targets for standards of performance under Section 111(d) in light of the particular characteristics of the regulated entities and the pollutant at issue. Nowhere does Section 111(d) limit standards of performance to technological, end-of-pipe requirements, and indeed, Congress specifically removed a requirement that performance standards be technologically based in its 1990 amendments to the Clean Air Act.¹⁸ Several states and utilities are already using the techniques outlined in EPA’s “best system of emission reduction” to reduce greenhouse gas emissions from the power sector—including not just efficiency improvements at coal plants, but also increased use of natural gas plants, increased use of renewables, and demand-side energy efficiency improvements. The electric grid is interconnected and the relevant product is electricity, not electricity produced by coal-fired plants. As a result, a system of emission reduction that controls greenhouse gases cost-effectively by treating fossil fuel-fired power plants as part of a network, averaging

¹⁶ See 42 U.S.C. § 7411(a)(1) & (d).

¹⁷ 79 Fed. Reg. 34,830, 34,833 (June 18, 2014).

¹⁸ Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 403(a), 104 Stat. 2399, 2631; *compare* Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 109(c)(1)(A), 91 Stat. 685, 699-700.

emissions across plants, and recognizing changes in fuel use that reduce emissions is both highly desirable and eminently reasonable.

If a state fails to adopt a plan that meets Section 111(d) requirements, EPA has the authority to promulgate a federal implementation plan instead. Opponents of the Clean Power Plan have suggested that, even if EPA can consider beyond-the-fence-line changes like improvements in demand-side energy efficiency to be part of the “best system or emission reduction” when it calculates state reduction targets, EPA will not be able to enforce such changes directly as part of a federal implementation plan.

It remains to be seen what a backstop federal implementation plan will look like for the Clean Power Plan. EPA has indicated that it will release a model federal implementation plan this summer, so there is little value in speculating about this issue now. However, a federal implementation plan need not institute particular energy efficiency or renewable energy requirements on either a state or a source, even if these approaches make up part of the “best system of emission reduction” in the guidance that EPA gives states under Section 111(d). For example, under a federal implementation plan, EPA could simply allocate a state’s emission budget to the power plants in the state. The power plants could then meet the emissions requirements using a combination of heat rate improvements and other verifiable means of greenhouse gas reduction, including securing reductions from other sources through an emissions trading framework.

Conclusion

I am very grateful to have been invited to testify today and will be delighted to answer any questions you might have.

Mr. WHITFIELD. Thank you, Professor Revesz. And thank all of you for your statements.

At this time, the members have an opportunity to ask questions, and I would like to recognize myself for 5 minutes at this time.

Ms. WOOD, we have heard a lot of discussion about inside the fence and outside the fence, and as I said in my opening statement, this regulation has been characterized in a lot of different ways; extreme, radical, power grab. Would you explain from your perspective of why this is so significantly different in that it allows outside-the-fence solutions?

Ms. WOOD. Outside the——

Mr. WHITFIELD. Turn your microphone on.

Ms. WOOD. Yes, thank you. The outside-the-fence line nomenclature is being used a lot. Indeed, you can't even go beyond the source itself. So here we are talking about the actual electric generating unit. And the reason why people talk a lot about going beyond the fence line with this rule is that, of the four building blocks that are set forth in the rule, only one of them actually gets any kind of emission reduction at the source itself, and that is building block one that has to do with energy efficiency improvements that can be made.

All of the other building blocks take place somewhere else beyond the source, outside the fence line. This has never been the case with any other rulemaking under Section 111(d).

Mr. WHITFIELD. Never been the case before?

Ms. WOOD. No.

Mr. WHITFIELD. I take it that a state would even be able to mandate the type of material used in a building under this regulation if it is adopted. Would that be correct?

Ms. WOOD. It——

Mr. WHITFIELD. In order to meet the overall emission cap.

Ms. WOOD. Right. Exactly. You could add building block five that would say you have to have Energy Star buildings to try to reduce——

Mr. WHITFIELD. Right.

Ms. WOOD [continuing]. Energy consumption. I mean that could also arguably fall within the building block four, which is designed to have consumers use less electricity.

Mr. WHITFIELD. I thought your illustration was very good about driving to work. You could be mandated to take a bus, you could be mandated to this vehicle or ride a bicycle certain days, whatever, but it doesn't do anything about reducing the emission of your automobile.

Ms. WOOD. Right, and that is exactly the point of beyond the source or beyond the fence line.

Mr. WHITFIELD. Yes.

Ms. WOOD. The emission reductions that you would get——

Mr. WHITFIELD. Yes.

Ms. WOOD [continuing]. From not driving your car one day a week have nothing to do with——

Mr. WHITFIELD. Yes.

Ms. WOOD [continuing]. The car running and getting——

Mr. WHITFIELD. Yes.

Ms. WOOD [continuing]. And emitting less pollution——

Mr. WHITFIELD. Yes.

Ms. WOOD [continuing]. It has to do with the car not running.

Mr. WHITFIELD. And so, Professor Tribe, do you agree that this inside-the-fence, outside-the-fence is a radical change for EPA?

Mr. TRIBE. Mr. Chairman, I agree very much that it is a radical change, and it is a radical change that bears on what this committee needs to think about in several ways. First of all, I think it shows how unrealistic is the claim that, you know, there is nothing going on here, just move along, don't bother, which is, I think, the essence of Professor Revesz's testimony. No constitutional problem, nothing new. But it is radically new. I mean we should all, I think, be honest with ourselves. Yes, many people think that there are severe problems that need to be addressed, but the question is do we care about the rule of law and how we go about addressing them.

Mr. WHITFIELD. Right.

Mr. TRIBE. Now, the way that a court, if a court gets its hands on this, would look at the outside-the-fence issue isn't just as a technical matter, inside, outside, it would look at it in terms of no limiting principle.

Mr. WHITFIELD. Right.

Mr. TRIBE. As a number of state attorneys general have said, if you—if the EPA can do this, it can tell you how often to use your electric toothbrush.

Mr. WHITFIELD. And the EPA has even had legal memorandums themselves saying that they didn't think they had the authority to regulate under 111(d).

Mr. TRIBE. Yes, that is right. In 1995, they didn't think they had the authority. They were told in 2008 by the D.C. Circuit they didn't have the authority. In 2011, the U.S. Supreme Court told them they didn't have the authority, and they say never mind.

Mr. WHITFIELD. Yes. Well, why wouldn't they regulate under Section 108?

Mr. TRIBE. Well, 108 to 110, with respect to the National Ambient Air Quality Standards, really don't fit this very well or else you could be sure that they would go that route. The reason they don't fit is that they are really based on state designation of geographical areas within the state as attainment, non-attainment or unclassifiable.

Mr. WHITFIELD. Right.

Mr. TRIBE. I would hate to live in an unclassifiable area. But the point is that CO₂ comes along with everything uniformly throughout the global atmosphere—

Mr. WHITFIELD. Right.

Mr. TRIBE [continuing]. And so you really couldn't approach it by making the findings. And besides the findings that you would have to make under 108 to 110 would be very difficult to make, and would require a procedure that they haven't gone through.

Mr. WHITFIELD. And they can't do it under 112 because CO₂ is not a listed hazardous air pollutant.

Mr. TRIBE. Right, under 112, there are 188 hazardous air pollutants listed by Congress. Nobody claims that CO₂, which is essential for life, is hazardous in that sense. They try to—

Mr. WHITFIELD. Yes.

Mr. TRIBE [continuing]. Split hairs by saying, well, it may not be hazardous but it is dangerous. But we are not writing a novel here, but we are talking about a law passed by this body, and I am concerned that I have cared about the environment ever since I was a kid, and I taught the first environmental law course in this country, and I have won major victories for environmental causes, but I am committed to doing it within the law. And there is a legal way to address these problems. They tried to get cap and trade with this Administration, didn't work. And I guess the EPA is now following a kind of marching order saying, well, if you can't do it through the lawful way, just take an agency and tell it to bend and twist and tear and rip the law.

When I use the metaphor that burning the Constitution is not a good source of fuel for dealing with these problems, I was being metaphorical only in part. When you tear the Constitution apart bit by bit, and give it the death by 1,000 cuts, what else will we sacrifice the Constitution for?

Mr. WHITFIELD. Thank you, Professor Tribe. My time has expired.

At this time, I recognize the gentleman from California for 5 minutes.

Mr. MCNERNEY. Thank you, Mr. Chairman.

Mr. Revesz or Professor, would you describe what the Supreme Court actions have been thus far with regard to the EPA that is applicable to the Clean Air Plan?

Mr. REVESZ. Sure. The Supreme Court has never said any—

Mr. MCNERNEY. Your speaker.

Mr. REVESZ. Sorry. The Supreme Court has never said anything that raises any questions about the legality of the Clean Power Plan. In fact, the case that Professor Tribe mentioned from 2011, the American Electric Power case, actually stands for exactly the opposite proposition. I mean the Supreme Court decided to preempt federal common-law claims because it said that EPA had the authority to regulate the carbon dioxide emissions of plants under Section 111(d). And so the Supreme Court has not stood in the way of this kind of regulation. There isn't a single Supreme Court case that raises any constitutional question. As I indicated, non-delegation claim is not a serious one. The Supreme Court has never struck any federal statute down on these grounds since the mid-1930s, and here all we have are two different conflicting approaches to a provision, and that is exactly where the agency gets the first crack at interpreting, and then the courts review the agency's interpretation. And that is actually already going on. There has been a challenge to the proposed rule that is now pending in the D.C. Circuit, it is going to be argued on April 16, and then the standard way that these things are going to happen, the D.C. Circuit will decide whether the agency's interpretation is right or is wrong, but there is no real constitutional issue there.

The Takings claim, again, the Supreme Court—there isn't a single case that would support holding this to be a Takings. If some firm thinks that it has been deprived of the whole value of its property through this regulation, which seems extremely unlikely, it can bring an action for compensation. If it, in fact, has been de-

prived of the value of its property, it would presumably prevail, but that is not a reason for striking down a nationwide rule.

And on the Tenth Amendment point, and I wanted to stress something that was very important, the cooperative federalism model that is the core of the Clean Air Act provides for federal standards, gives the states an opportunity to come up with state implementation plans, and if they don't, the Federal Government can act and impose a federal implementation plan. This is the scheme under Section 108 through 110 that the chairman mentioned. It is the way National Ambient Air Quality Standards are done in this country. These are the standards that have saved hundreds of thousands of lives. They are the most successful federal environmental program ever. And if Section 111(d) has the Tenth Amendment problem, as Professor Tribe ascribes to it, Section 109 would have exactly the same problem because it is exactly the same cooperative federalism model. And, in fact, Section 111(d) uses pretty much the same language as Section 109.

These are programs that have been around for 45 years, that were passed through a bipartisan consensus, they form the fabric of our environmental laws, and there is nothing different here than there is under Section 109.

Mr. MCNERNEY. Well, I was going to ask you about the Tenth Amendment, but you sort of wandered into that so I don't need to ask that question.

So with that, I will yield back the—

Mr. REVESZ. If I could say something about the unprecedented nature of this regulation that Professor Tribe and Ms. Wood alluded to. There is nothing of that sort. I mean just last term, the Supreme Court upheld an important EPA rule that regulates the interstate emissions where the statute says that it prohibits any source from emitting any air pollutant that will significantly contribute to environmental problems in downwind states. And EPA authorized states to adopt trading mechanisms that go beyond imposing controls on particular sources. This issue was litigated before the Supreme Court. Its opponents argued EPA didn't have the authority to do that because the statute said refer to any source, and in the end, the Supreme Court upheld that regulation on a 6-2 vote with Justices Scalia and Thomas dissenting.

So that is a very comparable program. It is also part of the same effort to control the emissions of existing power plants because they are such important contributors to pollution in this country.

Mr. MCNERNEY. Thank you, Mr. Chairman.

Mr. WHITFIELD. Gentleman yields back.

At this time, recognize the gentleman from Texas, Mr. Barton, for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman.

I don't normally reread parts of testimony, but I am going to in this case read the some of the paragraphs of Professor Tribe because I think he lays out pretty explicitly and clearly what this is all about. This is at least his executive summary of his testimony today, and I quote, "EPA lacks the statutory and constitutional authority to adopt its plan. The obscure section of the Clean Air Act that EPA invokes to support its breathtaking exercise of power in fact authorizes only regulating individual plants and, far from giv-

ing EPA the green light it claims, actually forbids what it seeks to do. Even if the Act could be stretched to usurp state sovereignty and confiscate business investments the EPA had previously encouraged and in some cases mandated, as this plan does, the duty to avoid clashing with the Tenth and Fifth Amendments would prohibit such stretching. EPA possesses only the authority granted to it by the Congress. It lacks implied or inherent powers. Its gambit here raises serious questions under the separation of powers Article I and Article III because EPA is attempting to exercise law-making power that belongs to Congress, and judicial power that belongs to the federal courts. The absence of EPA legal authority in this case makes the Clean Power Plan quite literally a power grab. EPA is attempting an unconstitutional trifecta: usurping the prerogatives of the states, Congress, and the federal courts all at once. Burning the Constitution should not become part of our national energy policy.”

Now, that is pretty straightforward. Professor Tribe, I assume that we would stipulate that you are an expert in the Constitution, is that fair to say?

Mr. TRIBE. Some people have said that.

Mr. BARTON. Some people have said that, OK. I would also assume that the committee can stipulate that you are an expert in regulatory authority or environmental issues, is that also fair to say?

Mr. TRIBE. Again——

Mr. BARTON. Some people say that?

Mr. TRIBE. Some people say it, right.

Mr. BARTON. Some people say that.

Mr. TRIBE. Yes.

Mr. BARTON. Well, would you say, and again I want to quote from another Supreme Court case, this is in the Supreme Court case back in 2001, *Whitman v. the American Trucking Association*, that Congress does not alter the fundamental details of a regulatory scheme in vague terms. It does not, one might say, hide elephants in a mouse hole. Would you say this is an attempt to hide an elephant in a mouse hole?

Mr. TRIBE. I would say, Mr. Chairman, that it is an attempt to hide a very large constitutionally-troubled elephant in a very tiny mouse hole, and not a mouse hole that was accurately described, I might add, by Professor Revesz. Let me give you, if I might, just one example. He——

Mr. BARTON. Be quick because——

Mr. TRIBE [continuing]. Talked about——

Mr. BARTON [continuing]. I only have a minute and a half left.

Mr. TRIBE. Well, he just misdescribed the cases. The case of *AEP v. Connecticut*, he said Congress—the Supreme Court said that the EPA has this power, except the majority opinion in footnote 7 said there is an exception under 111(d), you can’t use this power to regulate a source that is already being regulated under 112. Professor Revesz conveniently left out the only part of this case that is relevant.

He also says that—well, I shouldn’t take your time.

Mr. BARTON. Well, let me just reclaim my time.

I was on the committee in 1990. I don't think Mr. Green was. I am not sure anybody else currently here was on the committee. Mr. Pallone may have been, I am not sure, but I participated in these debates. I was not on the Conference Committee between the House and the Senate so I can't claim personal knowledge, but I was on the committee and I was actively engaged in a bipartisan fashion in crafting this law, and we had a coalition of conservative Democrats, like Billy Tauzin and Ralph Hall and Mike Synar on the Democrat side with the Republicans, and Mr. Dingell, who was chairman at the time, kind of played us back and forth, but there was never a debate in the committee that would interpret the Clean Air Act amendments as the proponents of the Clean Power rule. Never. It was never. Just the opposite. Just the opposite.

And, Mr. Chairman, I hope after the conclusion of these hearings, that we move legislation on a bipartisan basis that explicitly clarifies this point. The EPA has a right to set a national standard in interstate commerce to protect public health. It does not have the right to go in and micromanage how a state complies with a national standard which, as I understand it, is exactly what this Clean Power Plan does.

And with that, I yield back.

Mr. WHITFIELD. Thank you, Mr. Barton.

At this time, recognize the gentleman from New Jersey, Mr. Pallone, for 5 minutes.

Mr. PALLONE. Thank you, Mr. Chairman.

I am a little surprised by some of the legal arguments we are hearing against the Clean Power Plan, but I guess I have been around long enough to know that you can get constitutional lawyers and professors to say anything on both sides, just like you can get lawyers at home to say anything on both sides. So I just wanted to give Professor Revesz some time to comment on some of the comments that have been made by Professor Tribe. For instance, we are hearing that the Clean Air Act actually prohibits EPA from issuing the Clean Power Plan, however, the Supreme Court disagrees, citing *American Electric Power v. the Connecticut case*, if need be. An argument is also being made that since EPA acted to regulate mercury pollution from power plants, EPA does not have the authority to issue the Clean Power Plan. So, Professor Revesz, is this argument a reasonable interpretation of the law?

Mr. REVESZ. No. Several things. First, on the *American Electric Power* case that we have now been arguing, there is footnote 7. I am very familiar with it. Footnote 7 is subject to more than one interpretation. In fact, I am holding the Brief of the Federal Government in the D.C. Circuit case, and the Federal Government is interpreting this differently—the footnote differently. It is interpreting the footnote not to stand in the way of exactly what EPA is doing on the Clean Power Plan. On the standard techniques of statute interpretation, EPA, as the agency empowered by Congress to administer the statute, deserves deference. This is EPA's interpretation. EPA's interpretation is consistent with the argument I made, not with the argument Professor Tribe made.

Now, Professor Tribe may, in fact, be ultimately right. That is for a court to decide. I believe that he is wrong. EPA believes that he

is wrong. And we will find out, this issue will be argued extensively on April 16 before the D.C. Circuit.

On the question about whether EPA cannot regulate under Section 111(d) because it has regulated mercury emissions under Section 112, that is wrong as well. There are two amendments. There is a House Amendment and a Senate Amendment. They were both passed. Now, it turns out that only one of them was included in the U.S. Code. That was a decision made by a mere functionary. This is the Office of Law—of—something or other. Of Legislative Counsel. That person cannot supplant the will of Congress, and that is well established. So EPA has, for 25 years, under Administrations of both parties, sought to give meaning to both the House Amendment and the Senate Amendment.

The opponents would like us to ignore the Senate Amendment entirely, and they would like to give the House Amendment a particular gloss, and it is a gloss that involves rewriting the statute. The statute uses two—twice the word or, and they would like us to instead supplant the word and. The word and would be more convenient for them, but actually, the statute has the word or. So not only would we have to ignore the Senate Amendment, which there is no basis for doing, but we also would have to rewrite the House Amendment, and we would have to go through an additional hurdle which is not giving EPA the deference that it is due under traditional principles of statutory interpretation as embodied in the Chevron case.

If I can make one related point. On this analogy to cars, I don't think that the analogy to cars really works here because in the car example that Ms. Wood referred to, the product is the car, and if EPA wants to regulate cars it can regulate cars, and regulate the emissions of cars, as it does and has done since the early 1970s. Here, the product is electricity. It is not electricity produced by coal-fired power plants, it is electricity. And as you know, we have an integrated system for delivering usable electricity to consumers, and EPA can figure out what the best system of emission reduction for delivering usable electricity to consumers is.

Let me give you an example. When I was growing up in Argentina, where I was born, when I had a fever my mother would give me a mercury thermometer. These things aren't sold in this country because they are dangerous, and instead, we use digital thermometers. If using the logic of the opponents of the Clean Power Plan, the product would be a mercury thermometer as opposed to a thermometer and, therefore, a regulation that might actually bring mercury thermometers out of business might be considered suspect, but we have never used a principle like this for regulation in this country, for good reason, because doing so entrenches bad technologies and stands in the way of innovation. The product here is not electricity produced by coal-fired power plants, it is usable electricity delivered to the consumers' home.

Mr. PALLONE. Thank you, Mr. Chairman.

Mr. WHITFIELD. Thank you.

At this time, recognize the gentleman from Texas, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the chair. And welcome, Professor Tribe, Ms. Wood, and Professor Revesz.

This hearing is about one document; this Constitution. I have had this in my pocket for over 2 decades now. It is kind of worn, comes out by pages, but it is still is very much alive.

And my first question is to you, Ms. Wood. Under EPA's proposed Clean Power Plan, states would have only 13 months to develop their state plans. Is that 13 months by statute? If not, where does that mandate come from?

Ms. WOOD. No, the 13 months is not from statute. The 13 months is just a deadline that EPA has come up with in this proposed rule. Under the applicable regulations, the deadline is actually 9 months for a state to submit its plan, but the regulations are very clear that EPA can extend that deadline as it sees fit, so it has wide discretion there. So it has actually extended it from 9 months to 13.

Mr. OLSON. Wow, 4 more months. Now correct me if I am wrong, but under less complex programs don't they allow usually 3 years to determine these standards, 3 years as opposed to 9 months or 13 months, is that true?

Ms. WOOD. Typically, for state implementation plans, which are often called SIPs under the Section 110, the NAAQS Program, states do get 3 years.

Mr. OLSON. And this is for you, Mr. Tribe, as well as Ms. Wood. In light of the typical period for developing state implementation plans under the NAAQS Programs, does EPA's accelerated timeline in the Clean Power Plan for submitted state plans raise concerns? Constitutional concerns, can you do it, yes, no, reliable, whatever?

Mr. TRIBE. Are you asking whether the—

Mr. OLSON. What are your concerns, sir? What raises these concerns in all this accelerated development going down from 3 years to 9 months to 13 months, what—

Mr. TRIBE. Well—

Mr. OLSON [continuing]. Are your concerns? How about—

Mr. TRIBE. Frankly, I don't know that the time change raises a big constitutional concern, but if I could, without cutting too much into your time, verify—

Mr. OLSON. No, it is your time, sir.

Mr. TRIBE [continuing]. One point which I think is absolutely crucial to that little document that you are holding, and that is the suggestion that we should defer to EPA on which of the 2 versions of this law, are really the law of the land. Let me be absolutely clear, it was not some functionary, it was the Senate conferees on October 27, 1990, who said we recede to the House version. The Senate version couldn't be implemented because it was just a clerical thing that referred to something that no longer existed. So that is absolutely clear. This ghost version of the law that Professor Revesz wants to resurrect, and I don't know why he would bother if the law as it really is in the books supported what they are doing, but I don't have time to go through the grammar to show why it doesn't, this ghost version doesn't exist. There may be ghosts, but this ghost is a nonexistent one. And now what he is saying is that because courts generally defer to agencies like EPA, when they take a statute that is ambiguous and interpret it one way or another, it should also somehow follow that when Congress tosses a law into the air, and there is another ghost competing with

it, it is OK for the EPA to grab the ghost and run with it. What kind of version of the Constitution is he reading? Certainly not the one you have in your pocket.

Mr. OLSON. Yes, sir. I mean I am looking through this document. It has also the Declaration of Independence and the Constitution, 27 amendments, I don't see a ghost version anywhere in this document. So that is great insight.

My final question is for all three witnesses. EPA has announced they will finalize this proposed Clean Power Plan for existing power plants this summer. Do you expect that will be challenged in the courts, and will be that be struck down or vacated in your humble opinion?

Mr. TRIBE. Well, it is being challenged already in a particular case in the D.C. Circuit, but the problem is that that court might not reach the merits. It might say it is premature because, after all, we don't have a final rule yet, but the real dilemma is that states are confronted with not a ghost but a phantom. They are confronted with some federal alternative that they can't yet see, and so they are under enormous pressure, which is what makes this a violation of the Tenth Amendment, under enormous pressure to revise their whole economy. And by the time that has happened, it might be too late for a court to unwind everything that has gone on. And, you know, maybe if that would have solved the whole climate problem, one would say, well, what is a little legal violation, but when you look at what the EPA itself says, it says that if this proposal were perfectly implemented and were not offset by what goes on abroad, what it would achieve by the year 2100 is, at most, reducing the rise of sea levels by $\frac{3}{10}$ of a centimeter, which is two or three sheets of paper, and reducing global mean temperature by under $\frac{1}{100}$ of 1 degree centigrade. And I ask you, even if we could get all of that, is it worth that little document you are holding—

Mr. OLSON. Thank you, sir.

Mr. TRIBE [continuing]. And I would say no.

Mr. OLSON. I am out of my time. Thank you for being a ghostbuster.

Mr. WHITFIELD. Gentleman's time has expired.

At this time, I will recognize the gentlelady from Florida, Ms. Castor, for 5 minutes.

Ms. CASTOR. Thank you, Mr. Chairman. And thank you to our esteemed panelists today. It has been very insightful.

Professor Revesz, you have cited the *Whitman v. American Trucking Association* opinion as one of the most important environmental decisions overall in the history of the Supreme Court, and you say it has particular import for the Clean Power Plan. That was a case—who was the author of that case?

Mr. REVESZ. Justice Scalia.

Ms. CASTOR. Justice Scalia. The central issue was the delegation of authority, whether it was constitutional or unconstitutional, is that right?

Mr. REVESZ. That is correct.

Ms. CASTOR. So what did Justice Scalia say in that case that you think is quite analogous here, and that might be an issue—

Mr. REVESZ. Right.

Ms. CASTOR [continuing]. In future court cases?

Mr. REVESZ. Right. Thank you. So that was a case in which Professor Tribe wrote a Brief, arguing that the Clean Air Act was—involved an unconstitutional delegation of legislative power to the administrative agency. Justice Scalia was widely regarded at the time, and still is, as the greatest friend of non-delegation doctrine in the Supreme Court, and Justice Scalia writing for unanimous court rejected the non-delegation argument. It was rejected unanimously by a vote of 9 to 0. And that case is relevant to this situation because that was the last time that a broad non-delegation argument was made challenging a major environmental provision. It was a provision of the—

Ms. CASTOR. And that is the Clean Air Act too—

Mr. REVESZ [continuing]. Very same statute.

Ms. CASTOR [continuing]. Is that right?

Mr. REVESZ. It is the Clean Air Act as well, the very same statute. And Professor Tribe made his argument, just like he is making it now, and it was unanimously rejected by the Supreme Court.

If I can take just a moment to say something about ghosts. You know, I never knew that laws came in ghost and non-ghost versions. I mean they are either laws or they are not laws. If they are passed by both chambers and signed by the President, they are laws. If they are not passed by both chambers and not signed by the President, they are not laws. Here, there was a House Amendment and there was a Senate Amendment. Both the House Amendment and the Senate Amendment were passed by both chambers and they were signed by the President of the United States. That makes them a law.

What the Senate manager said about receding would have been really interesting and very important if, in fact, they had carried out what they said and withdrawn the language, but the language was not withdrawn, it was passed by both bodies and, therefore, it became a law. Not a ghost law, a real law. And what EPA is asked to do here is not, as Professor Tribe said, to pick whether it likes the House Amendment better than the Senate Amendment, the question is whether these conflicting provisions of the federal statute can be properly reconciled. That is the business of an administrative agency, and an agency takes a first crack at doing that. EPA is not going to say we like the Senate Amendment better, it is going to say we think we can give both meaning to both the House Amendment and the Senate Amendment. And if they do it appropriately, the courts will defer to their interpretation. And if they don't do it appropriately, the courts will strike it down. And that issue is now being litigated, as Professor Tribe noted, before the D.C. Circuit, and it is going to get argued on April 16, but certainly, that is the standard tool of statute interpretation. That cannot, under any plausible guise, become a constitutional problem.

Ms. CASTOR. And if it was unconstitutional, what would happen to a whole range of environmental protection laws in America?

Mr. REVESZ. Well, I mean if a court said that there was an unconstitutional delegation here because there was—there were separate House and Senate Amendments, and again, this would be—it is hard to even imagine how that could be the case, given the history of the non-delegation doctrine in this country, arguably both provisions would be invalid, and arguably we would go back to the

preexisting law which would be the 111(d) provision that was in the books before 1990, which would, I think quite clearly, give EPA the power to do exactly what it is doing here.

So even if this was all right, it is not clear the remedy would help opponents of the Clean Power Plan at all.

Ms. CASTOR. OK, thank you.

I yield back my time.

Mr. WHITFIELD. The gentlelady yields back.

At this time, recognize the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you for all you smart people for being here. This has really be educational and enlightening, and unfortunately, it is going to have real consequences.

So first, I was involved in a Conference Committee, the 2005 Energy Act, which was done here, open amendment, debated, and we don't do Conference Committees very much anymore, and so I think that is why there is confusion. So the first question is, if one chamber recedes to the other one, then the conference report has the language of the amendment that was accepted. There is no second amendment, is that true, Mr.—Professor Tribe?

Mr. TRIBE. Yes, here—

Mr. SHIMKUS. Briefly.

Mr. TRIBE. No.

Mr. SHIMKUS. Thank you. Ms. Wood?

Ms. WOOD. No.

Mr. SHIMKUS. Professor Revesz, you seem to think there is. How can there be two amendments when there—when you vote on a conference bill with language that has been given up by the Senate?

Mr. REVESZ. Because they both happen to be in the statutes-at-large.

Mr. SHIMKUS. If—typically, if a chamber withdraws its amendment, would you—

Mr. REVESZ. It is not—

Mr. SHIMKUS [continuing]. But the chamber did withdraw the amendment.

Mr. REVESZ. It did not—

Mr. SHIMKUS. Receded to it. Receded to the House language.

Mr. REVESZ. The House manager said—

Mr. SHIMKUS. All right.

Mr. REVESZ [continuing]. That they were receding—

Mr. SHIMKUS. All right.

Mr. REVESZ [continuing]. But both amendments were passed by both chambers, and both amendments were signed by the President. That is not the standard situation where a manager—

Mr. TRIBE. But it is standard. Excuse me, I don't mean to interrupt. It happens all the time. If Professor Revesz's view were accepted, there would be sheer chaos because this kind of situation—

Mr. SHIMKUS. You would have multiple definitions of the language that was supposedly passed by the Legislative Branch.

Mr. TRIBE. Right, and I am not—

Mr. SHIMKUS. OK.

Mr. TRIBE. I am not making a delegation argument here at all.

Mr. SHIMKUS. All right, thank you. I want to go to my second question.

To Ms. Wood, Professor Revesz talked about electricity in the interstate commerce and the regulated entity where it is really—what is it, you tell me? I think I know what it is but you tell me.

Ms. WOOD. The confusion that you are rightfully experiencing is because he is convoluting that somehow the Clean Air Act regulates the product that is being sold, and that is absolutely not the case. What—

Mr. SHIMKUS. And the product in this case would be?

Ms. WOOD. The product is electricity.

Mr. SHIMKUS. And what should they be doing?

Ms. WOOD. But what is being regulated, and what needs to be regulated, is the electric generating unit, the piece of equipment that is generating electricity. And in my car example, the fact that the car, which is what is the emitting source, and the product is the same thing, just happens to be a coincidence, but what the Clean Air Act regulates are sources of air pollution.

Mr. SHIMKUS. Yes, thank you. And I was following up on Congressman Olson's discussion on the 9 plus 4 equals 13 months. Were—how long would judicial review take in a case like this? This is to Mrs. Wood—Ms. Wood.

Ms. WOOD. Typically, in the D.C. Circuit you would be looking at 1½ to 2 years before you would get a decision.

Mr. SHIMKUS. So before we have—so that is the problem that a lot of us have. OK, there is a constitutional debate and conflicting views, I think we have established that, but we are going to enforce standards on not just the utilities but the ratepayers before this decision gets rendered.

Ms. WOOD. Indeed, and that is a very real problem, and you can see a very real-world example of it right now with the Mercury and Air Toxics Standards. That case is being argued next week before the Supreme Court, and a victory in that case is probably going to be hollow for many, many electric utilities because they have already installed the pollution controls under that rule.

Mr. SHIMKUS. And as we have had discussions here, the real-world implications are trying to comply financially. The difference between the Clean—some of the Clean Air Act and sulfur dioxide was that we had technology to do it.

Ms. WOOD. Yes. There were scrubbers that would remove the—

Mr. SHIMKUS. We knew the cost—

Ms. WOOD [continuing]. Sulfur dioxide.

Mr. SHIMKUS [continuing]. They were—and this committee has been clear in our hearings that every process except for advanced oil recovery in a small facility in Canada is not financially doable, and the government has invested and actually pulled out of the FutureGen 2.0 because it is too expensive. This government has made a decision they can't do a carbon sequestration.

Ms. WOOD. There is another critical difference between this and the Acid Rain Program that I think needs to be pointed out. The Acid Rain Program was enacted by Congress.

Mr. SHIMKUS. Yes.

Ms. WOOD. It was not done in a rulemaking by EPA.

Mr. SHIMKUS. Well, thank you. And I will just end on this. Mercury thermometers are not dangerous, but breaking the thermometers and drinking the mercury might be hazardous to your health because I think everyone here, based upon our age, probably used mercury thermometers.

And I yield back.

Mr. WHITFIELD. Thank you.

At this time, recognize the gentleman from Iowa, Mr. Loeb sack, for 5 minutes.

Mr. LOEBSACK. Well, thank you, Mr. Chair.

I am a former college professor, I have really enjoyed this a lot, but I am not a constitutional law scholar. I did comparative politics and international politics, but I really do appreciate the back-and-forth and all the rest, but eventually we are going to have to make some decisions here as a legislative body. There is no question about that.

Just one quick note. This isn't new in terms of the EPA taking it upon itself, if you will, or trying to implement some kind of legislation. I understand the arguments just how far they are going, whether they are going too far or not. As you all know, long ago, you know, Ted Lowey talked about how, you know, regulatory agencies often go much further than Congress ever intended them to go, and we are going to continue the debate whether the EPA is going too far or not. There is no question about that.

In the meantime, I would—and, Professor Tribe, if you would refrain from responding unless I ask you to do so. Professor Revesz, would you like to respond to Professor Tribe and his response to you on the 2 amendments issue? Just take a minute, if you would.

Mr. REVESZ. Yes. I think as I have already said, you know, it is often the case there are conflicting House and Senate versions of bills and in conference, the conference decides to go with one of the versions. That is the version that is then voted on by both chambers, signed by the President, and becomes law. That is the standard way that conferences work.

Mr. LOEBSACK. Yes.

Mr. REVESZ. Here, that is not what happened. It wasn't that there were conflicting House and Senate versions, and the conferees chose the House version. The House version then became the bill that was voted on by both chambers and signed by the President. That is not what happened. What happened was that both the House version and the Senate version made it into the bills that were voted by both Houses, they made it into the statutes-at-large, they were signed by the President, and they are both duly enacted laws of the United States.

Mr. LOEBSACK. All right, thank you, Professor Revesz.

Professor Tribe, what is the legal way to address these problems? In your testimony, you mentioned a legal way to address these problems. What are we talking about when you say the legal way, and what are some examples of that?

Mr. TRIBE. It seems to me that an act of Congress, or a series of congressional enactments, is the only legal way.

Mr. LOEBSACK. Yes.

Mr. TRIBE. I mean Congress has the power, did have the power to pass for the United States what California has done within California, a cap and trade plan, but it didn't succeed.

Mr. LOEBSACK. Yes.

Mr. TRIBE. Congress could fund alternative energy sources, put a huge amount of emphasis, as the government already is doing to some extent, on solar, on wind, on geothermal, but it really would take an act of Congress. It is just not enough for an agency to do it on its own. And here, even if there were, as Professor Revesz thinks, two laws that Congress did pass, assume he is right for the moment and—because both of them made it into the statutes-at-large, an agency would have to reconcile them, as he says, but you can follow both at one, that is, each of them precludes the EPA from regulating certain things. The Senate version focused on the pollutant, the House version focused on the source. You could obey both. There is no need to choose between them, and choosing between them is not an exercise of delegated power.

Mr. LOEBSACK. And you are someone who recognizes the importance of climate change, the reality of climate change, you said, and you have the—

Mr. TRIBE. No, I think—

Mr. LOEBSACK. And you have been environmental—

Mr. TRIBE [continuing]. Me personally—

Mr. LOEBSACK [continuing]. Very environmentally-minded over the years. If you could, you mentioned cap and trade, are there other kinds of things that Congress could do?

Mr. TRIBE. Well, you know, if I were just to be very imaginative, and I am only speaking for myself here, not for anybody else.

Mr. LOEBSACK. That is what I am asking you to do, right.

Mr. TRIBE. A lot of people think that the best solution is to pay countries not to do so much deforestation—

Mr. LOEBSACK. Yes.

Mr. TRIBE [continuing]. And that would take an expenditure of money. It is not the standard thing that comes to mind, it is way beyond the fence, but I think if Congress were able, I hate to say this, to get its act together, if Congress really could act effectively, there are a lot of things it could do.

Mr. LOEBSACK. Yes.

Mr. TRIBE. Now, there is a problem. A lot of my friends tell me, look, don't be an idealist, don't be utopian. Congress isn't going to do anything so why are you so hot about the EPA violating the law and the Constitution? Well, it is just, I guess, the way I was brought up. I think the law and the Constitution matter.

Mr. LOEBSACK. Yes, Professor Revesz?

Mr. REVESZ. Could I—yes. So under the Clean Air Act, Congress made a decision in 1970 not to define some limited number of pollutants that could be regulated, because Congress understood that as science evolved, other pollutants would become serious. And, therefore, the Clean Air Act uses a term air pollutant. Typically, air pollutant, dangerous to human health or welfare. EPA was basically required by the Supreme Court, in *Massachusetts v. EPA*, to acknowledge that greenhouse gases were air pollutants, subject to regulation under the Clean Air Act. This is not some power grab by this Administration, this has been now a process that has been

going on for almost 10 years, and the Supreme Court said yes, when Congress said air pollutants, it meant something pretty broad. It is a broad definition, and greenhouse gases are air pollutants. And then EPA was asked to determine whether greenhouse gases endangered public health, and actually, the Bush EPA administrator made the initial endangerment determination. It didn't become effective at the end of the Bush Administration, and then this Administration made it again. And so now greenhouse gases are air pollutants, endanger public health, and that puts them at the core of what the Clean Air Act is designed to deal with.

Mr. LOEBSACK. Thanks to all of you.

Thanks, Mr. Chair.

Mr. WHITFIELD. Gentleman's time has expired.

At this time, recognize the gentleman from Ohio, Mr. Latta, for 5 minutes.

Mr. LATTI. Well, thank you, Mr. Chairman. And thank you very much for our witnesses today. We appreciate your testimony, and it is very informative.

If I could start, Professor Tribe, last year the Supreme Court cautioned the EPA against interpreting the Clean Air Act in a way that would bring about an enormous and transformative expansion of the EPA's regulatory authority without clear congressional authorization. In your opinion, does the proposed Clean Power Plan comply with this directive?

Mr. TRIBE. I think that what the court said in the case that you are quoting, which was *Utility Air Regulatory Group v. EPA*, would apply many times over to this plan, and in particular, in that very case the court addressed the point that Professor Revesz just made. Yes, air pollutant in the dictionary definition part of the Clean Air Act is a very broad term, and it does encompass greenhouse gases, but when the court, in *Mass v. EPA*, in 2007, found a specific provision for regulating greenhouse gases in connection with tailpipe emissions, what UARG, the decision last year, said is you can't rewrite clear statutory terms to extrapolate from the fact that something which is a greenhouse gas for purposes of a particular regulatory context can, therefore, be regulated under a different statutory provision which, it is very clear, prohibits the regulation under 111(d) of greenhouse gases or any other air pollutant from a source that has already been forced to spend a lot of money under 112 in order to meet the requirements of 112 with respect to the 188 hazardous air pollutants.

Mr. LATTI. Well, OK. Professor Tribe, also then, the Clean Air Act places limits on the EPA's authority to use the Section 111(d) to regulate existing sources that are already subject to regulation for hazardous air emissions under Section 112. Does this prohibit the EPA from regulating coal-fired utilities under Section 111(d)?

Mr. TRIBE. From regulating? I am sorry, I didn't hear you—

Mr. LATTI. From regulating coal-fired utilities—

Mr. TRIBE. Under 111(d).

Mr. LATTI [continuing]. Under 111(d).

Mr. TRIBE. It certainly prohibits them as long as those utilities are being regulated under 112 for the hazardous pollutants. Greenhouse gases cannot be regulated under 111.

Mr. LATTA. Well, with that then, especially from the testimony I have been hearing this morning, should the EPA's interpretation of these statutory provisions be entitled to deference by the courts, and if not, why not?

Mr. TRIBE. Well, two reasons. First of all, what it is doing is not interpretation, it is revision. It is picking a statute that Congress did not enact, and that is not something to which the courts would ever defer. Secondly, the principle of deference under a case called *Chevron* only kicks in where there is an ambiguity, and here there isn't an ambiguity. And besides, deference is trumped by a principle called constitutional avoidance, that is, the Supreme Court has said, and the D.C. Circuit has said, that when an ambiguous statute, and I maintain this is not ambiguous, would cause constitutional problems if you defer to the agency's interpretation of it, then you don't defer, so that even if deference were otherwise available, here it would be trumped by the serious constitutional problems that I have outlined, haven't had time to talk about in detail, but my statement in written form explains why, for example, even though the property is not being totally destroyed, this is a violation of the Fifth Amendment, and explains a number of other things. So given those constitutional problems, which I don't think have been solved—

Mr. LATTA. Well, and—

Mr. TRIBE [continuing]. Deference—

Mr. LATTA [continuing]. If I can just follow up with one question here because I am short on time. The Clean Air Act as a whole, and Section 111(d) in particular, are based on principles of cooperative federalism and are designed to give states autonomy and flexibility, and implementing emission control programs does the proposed rule strike an appropriate balance between the EPA and the states?

Mr. TRIBE. Well, I think that the EPA is not striking a constitutionally appropriate balance. It is basically saying, yes, you have some choice to meet this severe limit, but it is like saying your money or your life, and you can choose whether to pay me in cash or by check or by Bitcoin, that is, there is no power to command the states to do any of this stuff. And saying that, well, this is just optional, it is like cooperative federalism, completely confuses what happens normally under the Clean Air Act with what is happening here. Normally, the national goal is set and the Federal Government works with the states to find a way to implement it locally. That is not what is going on here. What is going on here is radically different.

Mr. LATTA. Thank you.

Mr. Chairman, my time has expired.

Mr. WHITFIELD. Gentleman's time has expired.

At this time I will recognize the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman, and ranking member for holding the hearing. I want to thank both our panels of witnesses to be here today.

I know there is some disagreements about the EPA Clean Power Plan, but as a lawyer, I am always interested in hearing the arguments from our professors. Besides this hearing, the EPA Clean

Power Plan has been subject to a lot of debate. Whether EPA has the authority to regulate power plants was ultimately decided by the courts, and it is this issue I find most disappointing. I have been in Congress for some time, and I would like to see a solution on our climate issues offered by this body, and not necessary because of the Supreme Court ruling. We should work together and control carbon emissions. That doesn't mean eliminating traditional fuels, and it certainly doesn't mean dismantling the EPA. It means a reasonable approach from a legislative body that would reach required compromise, and that is what we have been sent here to do, and I look forward to both panels.

Professor Tribe, your testimony, a portion that jumped out at me is on page 11 where you say it makes far more sense to address climate change by legislation. I couldn't agree with you more, but without congressional action, the federal agencies are acting under the existing authority given by the Supreme Court. Professor Tribe, in your testimony on page 14, you address EPA's reference to the Chevron USA case. It is my understanding Chevron created a two-part test to determine regulatory authority. There are many attorneys in Washington and D.C. and around the country making large sums of money advising clients on which version of the House or Senate Amendment the Clean Air Act are law. If the Supreme Court agrees to hear this case, is it your argument that Congress spoke directly to the question at issue, or do you believe the court will rule on the agency's interpretation?

Mr. TRIBE. Well, I don't think the court would accept the agency's interpretation. I think here the statute is too clear, and the court in the UARG case made as clear as it could possibly have made it that the fact that greenhouse gases may be a terrible problem doesn't give a blank check to any agency to rewrite the law.

Mr. GREEN. OK.

Mr. REVESZ. If I can just for a minute—in that case, EPA was trying to regulate 86 percent of the carbon dioxide emissions of certain stationary sources. The court in that case allowed EPA to regulate 83 percent of those emissions. Justice Scalia indicates that in his opinion. It only deprived the EPA of the authority to regulate the last 3 percent, and that was because that statute had a specific numerical provision that would have required EPA to either regulate a much larger number of sources than EPA wanted to do, or else disregard the number. And as a result of that problem, the Supreme Court deprived EPA of the authority to regulate the last 3 percent of those emissions, but allowed EPA to regulate 83 percent of the emissions of these stationary sources.

So EPA ended up getting most of what it sought—the vast majority of what it sought out of that case, and the statutory problem that arose was a very specific statutory problem under that particular provision that has no bearing on other provisions that don't have those numerical limits.

Mr. GREEN. Professor Revesz, one of the other things, since I only have a minute and a half, would a strict reading of the House version exclude many if not all potential regulated sources, and you have written extensively on environmental law and regulatory policy, is Congress, while we don't interpret the law, it is our job and

the courts to do that, we have the responsibility for conflicting issues in the laws that we wrote. Do you agree with that?

Mr. REVESZ. Absolutely. And it often happens. This isn't an example of Congress doing something wrong. I mean it often is the case that statutes get passed and they have ambiguous provisions that require agency interpretation. This is the bread and butter of what the federal courts then to do is to determine whether the agency interpretations are entitled to deference, and whether they should be upheld.

Mr. GREEN. And that is the federal court's job. Let me give you an example of one of the legislation that we have worked on passing. Congressman Olson and Congressman Mike Doyle and I have introduced legislation, and it has actually passed the House, to resolve conflicting language in the Federal Power Act, and that is our job to be able to do that, to do the legislating if there is an issue that the courts may not be addressing in our opinion is what the law is.

Professor Tribe, I am sorry, I don't give you any more than 10 seconds, but—

Mr. TRIBE. Well, I agree with that allocation of responsibility. I also think that measuring the law by percentages is not exactly right. I saw those talking points too—

Mr. GREEN. Yes.

Mr. TRIBE [continuing]. The EPA wanted to win, and they said why don't you point out we won 83 rather than 86. That wasn't the point. The point was that their approach to the law was totally rejected by the court.

Mr. GREEN. OK.

Mr. REVESZ. No, there were two issues. EPA won on one issue and lost on one issue. It was not totally rejected by the court.

Mr. WHITFIELD. Gentleman's time has expired.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time, I will recognize the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman. And thank you to the panel for being here. It is always enlightening to hear some of these discussions. I know ultimately the decision is going to be made by the courts, but it helps us to understand a little bit of these issues, particularly between 112 and 111(d), but I don't think the American public gives a hoot. They really don't. They just want to make sure that Johnny has a job, and their electric rates are going to be reasonable for them to be able to continue. And I see us getting caught up. We start chasing these rabbits, that they get us distracted from where we need to be.

I will be the first to tell you that I—do I think climate change is occurring? Absolutely. I think it is. But we have taken this simplistic route to go this direction, and so what I want to do is get back more to the fundamental. You all were chasing this rabbit all the way down. You are arguing over 112 and 111(d), and you are talking about phantoms and ghosts, I think. Don't care. What are we going to do? What are we doing here with this fight? I would like to get back to the more basic where we are, because under the United Nations it said that 96 percent of the CO₂ emissions are naturally occurring. Only 4 percent of all the CO₂ emissions of the

world are anthropogenic, manmade. See, I can use the term like you all. Only 4 percent. And the United Nations goes on to say that all coal-fired powerhouses in America, if you shut off every one of them shut down in America, under the United Nations, said you only reduce the CO₂ emissions by $\frac{2}{10}$ of 1 percent. That is not my statistic, that is from the United Nations, $\frac{2}{10}$ of 1 percent.

So what I am doing, I am the engineer in the room here on this. So now we are getting to the point, under this rule, they want to reduce it 30 percent, so we are talking about a rule that reduces 30 percent of $\frac{2}{10}$ of 1 percent. We are talking about a reduction of CO₂ emissions in the globe of $\frac{6}{100}$ of 1 percent. Forget the argument over 112 or 111(d), we are going to spend billions of dollars, we are going to raise rates, jobs are going to be lost—to save $\frac{6}{100}$ of 1 percent of the CO₂ emissions. That doesn't make logical sense. From an engineering perspective, there is something wrong when we start chasing a rabbit over here, when we are putting our economy at risk over $\frac{6}{100}$ of 1 percent.

Professor, could you respond to that? Are we chasing the right rabbit here?

Mr. TRIBE. Well, my grandchildren ask a similar question, which shows how wise you are, because I think my grandchildren are smart as whips. Grandpa, why are you worried about this 111 and 112 stuff? Is the world going to be destroyed? And then I tell them, well, there is this agency and it says if you do what it wants, they are not going to save the world, in fact, maybe by the year 2100, they will prevent the oceans from rising as much as, well, two sheets of your paper. But they think that by making a start, it is good, better than nothing. Well, your grandpa spends his life teaching about the Constitution, and so I sort of put that in the balance. There are a lot of details there, they look like rabbits going into rabbit holes, but that matters because in the long run, all those rabbits add up to something that this country has built. And then they ask a different question. They say, well, if we make a start, isn't that good? And then I try to give them the old proverb, you can't leap across a chasm in two steps, you know. Jumping halfway or even 1 percent of the way might do a lot more harm, like splat on the bottom of the chasm, than not doing this at all and looking for something else. What would you do, Grandpa? And then I say I am not an expert in that stuff.

Mr. MCKINLEY. Ms. Wood?

Ms. WOOD. I wanted just to expand for a second on what Professor Tribe was saying about needing to make a start and wanting to build on something. I think it is important to recognize here that if these sources are not regulated under Section 111(d), they are regulated under Section 112, and that is what is prohibiting the 111(d). Under 112, these sources have to put on maximum available control technology, maximum. So it is not as though these sources are not going to be controlled. And more importantly, in terms of when you start talking about carbon dioxide, I think it is also important to note that EPA has said that the carbon benefits from that maximum available control technology are estimated to be \$360 million annually. So it is not as though there isn't a start being made.

Mr. MCKINLEY. Right. And my time has run out, but I would rather us be focusing on something more practical than this ideological—why aren't we doing energy efficiency, why aren't we looking at more research into clean coal technology, but to simply go after it and start doing this and costing us jobs I think is incredibly naive.

Thank you, and I yield back.

Mr. WHITFIELD. Gentleman's time has expired.

At this time, recognize the gentleman from Kentucky, Mr. Yarmuth, for 5 minutes.

Mr. YARMUTH. Thank you very much, Mr. Chairman. Thanks to the witnesses.

After listening to this discussion, I am not sure I am happy or sad that I dropped out of law school years ago. I think I am happy. But I want to go back to—you mentioned the Massachusetts v. EPA case, and I—what we were debating the Waxman-Markey bill several years ago, 2009, and so forth. That was kind of the motivating factor, I think, for many of us at that point, that if the Supreme Court had said that we have to regulate carbon dioxide, wouldn't it be better for Congress to act and create a mechanism for dealing with it than trusting the EPA to be flexible enough to deal with states like my own, and Congressman McKinley's as well. So I am curious because I have heard some difference of opinion, and I don't want to start another debate, on whether that decision actually mandated, made it compulsory for EPA to regulate CO₂ or just basically made it permissive. You are shaking your head, Ms. Wood, do you want to answer that?

Mr. REVESZ. Well—

Mr. YARMUTH. Or either one.

Mr. REVESZ. Yes, that decision held that—EPA in that case was arguing that greenhouse gases were not air pollutants for the purposes of Section 202 of the Clean Air Act. The Supreme Court held that they were, in fact, air pollutants for the purposes of Section 202 of the Clean Air Act. It did not mandate regulation because regulation is mandated only if the air pollutants endanger public health or welfare. So the next step was for EPA to make the determination, the court did not make it as was appropriate, to make the determination whether greenhouse gases endanger public health and welfare, which is a statutory term. As I indicated earlier, Stephen Johnson, who was the EPA Administrator at the end of the Bush Administration, made that endangerment finding, but the Administration ran out of time. It wasn't approved during the Bush Administration, and it was, therefore, made anew by the Obama Administration. And that was challenged in the D.C. Circuit. Many groups challenged the endangerment finding and said that that was—and the agency had acted inappropriately in making that finding. The D.C. Circuit upheld the agency's decision. Those same groups then petitioned the court for certiorari, and the court, while granting cert on other issues in that case, and that ended up being the Utility Air Regulatory Group case, denied certiorari on the endangerment finding.

So now it basically is the law, or at least the agency has said that greenhouse gas emissions endanger public health. And now Massachusetts v. EPA dealt with Section 202 of the Clean Air Act.

The definition of air pollutant and of harming public health is very similar across many sections of the Clean Air Act and, therefore, that case has now led to all these other rules. These rules are basically based on exactly the same legal principle. And EPA is proceeding accordingly with the Supreme Court——

Mr. YARMUTH. They are doing their job as they see it, based on what the Supreme Court said——

Mr. REVESZ. Right.

Mr. YARMUTH [continuing]. About CO₂.

Mr. REVESZ. What the Supreme Court said in *Mass v. EPA*, that greenhouse gases are air pollutants. Well, the D.C. Circuit said, in the case that became *UARG* in the Supreme Court, is the endanger public health, and then——

Mr. YARMUTH. In fact, there has been a considerable amount of at least scientific evidence that there is a connection between CO₂ and elevated levels of asthma and so forth in communities. I know that is true in my community as well.

I want to get to a question real quick with Ms. Wood. In your issue about whether or not we regulate the product or go outside the fence, or so forth, if under a state's plan, the state utilities, power companies, offered financial incentives for conservation to its customers, would that fit within your conclusion of being something that would be consistent with your interpretation of what EPA can regulate, even though in this case it would be voluntary, the states would be doing it, not EPA, but EPA would have to approve the plan?

Ms. WOOD. I think the key difference here——

Mr. YARMUTH. Yes.

Ms. WOOD [continuing]. Is in how the targets are set versus the flexibility that you could use to meet that target. And I think this is a key distinction that needs to be made. And the issue isn't whether a power company could do what you are saying to meet the target, the question is should those types of things be considered in determining what the target is. And to that, my answer is no, the Clean Air Act doesn't permit that. 111 has always been understood to begin and end at the source.

Now, in the Clean Air Mercury Rule that EPA did several years ago, they did have flexible cap and trade mechanism to meet that limit, but the target itself and the limit itself was based on technology that could be applied at every unit. So you started with activated carbon injection, and you figured out what the rate would be at each unit, but then you allowed flexibility in terms of how you would meet that.

So in your example, I think that would be permissible in terms of meeting the target, but it would not be permissible for setting the target.

Mr. YARMUTH. OK, appreciate that.

I yield back. Thank you, Mr. Chairman.

Mr. WHITFIELD. Gentleman yields back.

At this time, recognize the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you, Mr. Chairman. Appreciate you having this hearing very much.

I rarely disagree with my colleague from West Virginia, but in this case I do. The process and the procedures by which we get our laws and pass our laws may not always make sense and be practical in the minds of some, but it is what has allowed our republic to exist for the length of time it has, over 200-and—I guess we are closing in on 220-some-plus years, and it is extremely important.

Professor Revesz, I love these things, and I am going to go down a different rabbit hole than the one we have been going over, although I am coming back to that one because I love that one too. The proposal that you make is a parliamentary procedure impossibility. It cannot happen. Doesn't matter what the issue is. Jefferson is very clear in the Manual of Parliamentary Practice. When there are differences between the two Houses, they get together in a conference and they work those differences out. If both Houses adhere to their position, the bill itself dies. It is not for you to say today that the bill should die if there is some confusion because there are two different versions. There are not two different versions, there is one version. It could not have passed out of both Houses, gone through a Conference Committee, and gotten to the President's desk unless there was one version, and one version exclusively.

And then we get to the point that Professor Tribe made, and it is an honor for me to be in your presence. We are not always going to agree. There are a lot of things we are going to disagree on politically, but your defense of the Constitution I am 100 percent behind and——

Mr. TRIBE. Thank you.

Mr. GRIFFITH [continuing]. Agree. And even when the rules in the Constitution are against me on what I believe ought to happen, I respect that those bodies and those rulings must be followed.

And so we get to that because I think that if there was some kind of a disagreement and suddenly it is found 25, 30 years later, that creates a problem, and I would submit—I don't know about the 1995 ruling. I would ask you quickly if you could tell me about that. You said that it had already been determined in '95, '08, and '11, and I know '08 and '11.

Mr. TRIBE. Right. Well, in 1995, the EPA itself interpreted the Section 111(d) as I have, and as I think the courts would.

Mr. GRIFFITH. OK. And then we get to 2008, and you didn't make this point, although I am sure you are aware of it, and I find this language fascinating and brought this up to the EPA months ago. That decision, if you read it, part of it says this requires vacation of CAMR's regulations for both new and existing EGUs, electric generation units.

Mr. TRIBE. Yes.

Mr. GRIFFITH. EPA promulgated the CAMR regulations for existing EGUs under Section 111(d). This is a court opinion by the Circuit Court in D.C. This is what I am saying here. For existing EGUs under Section 111(d). But under EPA's own interpretation of the section, it cannot be used to regulate sources listed under 112.

Mr. TRIBE. Right.

Mr. GRIFFITH. The judge found that they had conceded, and he goes on to say, EPA thus concedes that if EGUs remain listed under Section 112 as we hold, then the CAMR regulations for exist-

ing sources must fail. The EPA appealed that ruling, but not on that point.

Now, what is significant about that, and the question I have for you, and I am going back to first year of law school for myself, is the EPA now precluded, under either the theory of res judicata or collateral estoppel, having conceded the point in the 2008 case and not appeal to the Supreme Court, and having been a party in that case, albeit not a party in the 2011 case——

Mr. TRIBE. So——

Mr. GRIFFITH [continuing]. Have they conceded the point, and are they now thrown out on their backsides because they have already conceded this point, and to bring it back up is a waste of time, as Mr. McKinley said?

Mr. TRIBE. I think, because that case was *New Jersey v. EPA*, it is only New Jersey that could make that collateral estoppel argument. Other people confronted by an EPA that says we have now changed our minds, like Robert Jackson once said, the matter does not appear to me now as it appears to have appeared to me then, other people are not going to be able to estop the EPA. But the EPA is free to make these arguments, I just think they are wrong and will lose.

Mr. GRIFFITH. All right. And you think they will lose also in looking at 2011, although they were not a party to that, you were correct in referencing footnote 7 that said that the Supreme Court specifically said in their opinion, previously cited approvingly by Professor Revesz, that there is an exception, EPA may not employ 7411(d), which is what we are talking about, if existing statutory sources of the pollutant in question are regulated under the National Ambient Air Quality Standard program, 7408 through 7410, or the Hazardous Air Pollutants Program, 7412, which is what we are talking about is 111 and 112, am I not correct?

Mr. TRIBE. Correct, and that use of the word or supports the court's reading. The courts have been consistent in accepting this reading all this time, and it is amazing, though it is not illegal as such, for the EPA to scratch its head and say how are we going to win this case, we have to invent a new statute.

Mr. GRIFFITH. And they have reached pretty deep to find something that they could hang their hat on.

Mr. TRIBE. They reached very deep, to something that Senator Durenberger when it was first proposed said I can't imagine this being used very often. It has only been used 5 times. It is a technical little—well, it is a mouse hole, and they are pulling an elephant out of it.

Mr. GRIFFITH. Thank you. I have to yield back. I wish I had more time.

Mr. WHITFIELD. Gentleman yields back. Thank you.

At this time, recognize the gentleman from Maryland, Mr. Sarbanes, for 5 minutes.

Mr. SARBANES. Thank you, Mr. Chairman. And thanks to the panel.

I don't know that I have a whole lot to add or more to ask, but we have talked about phantoms and we have talked about ghosts, and we are now getting to a dead horse in terms of beating it over this issue of the interpretation. I gather that the crux of this is

whether the EPA's pursuit of the Clean Power Plan is warranted or authorized under Section 111(d), and that then sets to this question of whether it is seeking to balance and interpret the conflict between these two amendments is appropriate or not appropriate.

Because you all have been debating this most of the time we have been here, I am assuming that while there are other parts of your argument, and briefs, that you point to, that you view that as probably being the issue upon which a court's review of this question is going to turn. Is that fair?

Mr. TRIBE. Well, I have tried to encapsulate the essence of it, but what I submitted is over a 50-page document, and I do think courts will pay attention to the several different parts of the argument. One, that even if Congress did give this power to the EPA, it would violate basic principles of federalism, and that is one reason that a court would not interpret Congress' having done so. Two, that there are powerful issues about the statute itself, and the EPA's authority to go beyond a statute. And three, separation of powers issues that arise out of the EPA's recognition that because the statute as written doesn't quite do what they want to do, they have created a magical mystery tour through the parliamentary procedure to say, well, there are two statutes. And although I have suggested, both here and in my written testimony, that if there really were two, which doesn't happen, they could follow them both by both outlawing the regulation of pollutants that are covered by 112, and outlawing the regulation under 111(d) of sources under 112.

Mr. SARBANES. Professor Revesz, do you—

Mr. REVEZ. Yes, if I can answer your question more directly. The debate we have been having here is replicated in hundreds of pages of briefs before the D.C. Circuit. All of these issues are being aired in great detail on both sides. Most of the positions that I have made here are made by the U.S. Department of Justice, by many states. Other states are taking the opposite position. Some industry groups are agreeing with my interpretation of the Constitution of the statute, other industry groups are on the other side. All of this, there are hundreds and hundreds of pages of briefs on all of the issues we have been talking about.

If I can just take a moment to respond to an issue that Mr. Griffith raised. There is clearly only one version of the statute. There has to be only one version. That one version includes arguably inconsistent provisions. They are arguably consistent, and arguably inconsistent, but they were both voted on by both chambers and signed by the President. And the CAMR case is different because in the CAMR case, the problem was that EPA had initially sought to regulate mercury emissions under Section 112, then in Bush Administration decided to regulate under 111(d), but it was trying to regulate the same mercury emissions, the same hazardous air pollutant. Everyone concedes that EPA cannot invoke Section 111(d) to regulate a hazardous air pollutant that is being regulated under Section 112. But here the issue is the greenhouse gases are not hazardous air pollutants regulated under Section 112, so the CAMR case is actually an opposite to this problem, but I am sorry, I took up a little bit of your time.

Mr. SARBANES. No, actually, I was going to ask you to add whatever you think is left on this question. Can you real briefly, in 43

seconds, just give me a little bit more of your perspective on why the Takings issue is not determinative here?

Mr. REVESZ. Well, because first, this is a regulation, it is not a physical Takings, so a regulation would have to deprive a property owner of almost all of the value of the property. And if there is a property owner for whom that is the case, the proper remedy is not to invalidate this regulation, but it is for that property owner to sue separately at a later time for compensation.

Mr. SARBANES. Thank you.

Mr. TRIBE. Could I—

Mr. SARBANES. Sure, Professor Tribe. You have—

Mr. TRIBE [continuing]. Add one word?

Mr. SARBANES [continuing]. One more second.

Mr. TRIBE. We have never suggested striking down the law. Compensation is all we have talked about, but ever since The Steel Seizure Case, the Supreme Court has said that an agency, and even the President is not allowed to impose a bill on the American taxpayers for compensation unless Congress, which has the power of the purse, has clearly authorized the action that is going to require the compensation. That is all we have been talking about under that part of our—

Mr. REVESZ. But there is no compensation required here.

And one last point. On footnote 7, as we have now, I think, indicated, footnote 7 is subject to interpretations, and there are literally dozens of pages in the D.C. Circuit briefs on either side of that issue. I think it is pretty clear what footnote 7 means. Obviously, Professor Tribe thinks it is clear on the other side, but there are two interpretations of footnote 7 of the American Electric Power case that are out there.

Mr. WHITFIELD. Thank you. Gentleman's time has expired.

At this time, recognize the gentleman from Missouri, Mr. Long, for 5 minutes.

Mr. LONG. Thank you, Mr. Chairman. And thank you all for being here today.

When we started this hearing, I didn't have this document in my hand. And I represent the Seventh District in Missouri, which is Springfield, Joplin, Branson, Missouri, and we have a lot of successful businesses that germinated there. Bass Pro Shops started from nothing and has become what it is today. O'Reilly Automotive, which is across the United States, very successful company. We have a great medical community there, a lot of successful businesses, and a lot of people that just want to raise their kids in a good part of the country. Have a good job, raise their kids, have a nice place to raise their family. And I saw in my notes today, my little handy-dandy pocket card here, that the city of Springfield was coming to see me today, and I thought that is great. They think enough of me to come and talk to me about some issues that they have pressing. I am glad they came to Washington to see me, but they didn't come to Washington to see me, they came for a conference. And the reason they came to this conference, there were two cities of the United States that were invited to the conference to speak on this. One was Richmond, Virginia, and the other was Springfield, Missouri. And the reason is they have done such a

good job, such a forward-thinking job with these different issues that we are discussing here today.

I want to read you just a little snippet of what we have, and then kind of ask you all's suggestion on something. But this is from Mayor Bob Stephens, Mayor of Springfield, Missouri. Affordability and unfunded environmental mandates. And like I say, you can think what you want about things, but I stepped off in a side room here and got this in our meeting, I couldn't run back to my office and meet him over there, so I was required to meet him here due to time constraints. Affordability and unfunded environmental mandates. As you know, the city of Springfield, Greene County, and Springfield City Utilities have been working cooperatively to develop a proposed integrated plan framework that would foster a more holistic approach to the various unfunded EPA environmental mandates that all communities are facing; wastewater, storm water, drinking water, air quality, and solid waste. Our integrated plan framework attempts to consider all of these issues together instead of each one separately, and to focus resources where the community can achieve the biggest bang for the buck. We appreciate your efforts to ensure that future unfunded environmental mandates must be affordable for the community and the citizens.

Now, one of the things that they did in this report that they are in here in Washington, and were honored enough to be thought of highly enough for the conference to be one of two cities, is they did the math. I know you all are constitutional scholars and such, but I don't know how your math is, but the math that they did was over the next 15 to 20 years, these unfunded mandates from the Environmental Protection Agency are only going to cost each individual in my district a little over \$46,000 per person over the next 15 to 20 years.

So I guess I will start here with Professor, is it Revesz? Do you have any suggestions what I tell the folks back home about these?

Mr. REVESZ. Well, it is a little hard for me to comment on a document that I haven't seen, but I can tell you from my experience, one of my areas of expertise is a cost benefit analysis of environmental regulation, and I actually care a lot about having the benefits of environmental regulation exceed the cost, and I am a big proponent of the use of cost benefit analysis to justify environmental regulation, which sets me apart from actually the vast majority of environmental law professors in this country who don't like it as much as I do. But I can tell you that often, these early cost estimates turn out not to be accurate, and—

Mr. LONG. They are usually low, aren't they?

Mr. REVESZ. No, actually, empirical studies show that initial cost estimates tend to be higher than the ultimate costs are, and there is a good reason for that. As initial estimates are generally made on the basis of sort of current end-of-the-pipe technology, but there is a great ingenuity in American business, and businesses figure out ways of doing things more effectively and more cheaply, and for that reason, in the end, costs end up being lower than are predicted.

There is a lot of debate on cost estimates. There is huge variance, and each of those estimates should be submitted to serious peer re-

view by serious experts, and I would take well-conducted cost estimates very seriously. But——

Mr. LONG. So we——

Mr. REVESZ [continuing]. I would caution——

Mr. LONG. I hate to interrupt you but I am about out of time, but Johnny Morris, the owner of Bass Pro Shops, has a saying, we all live downstream. We all do live downstream. We want to have a clean environment to raise our family, and whether it is in the Ozarks or Washington, D.C., or the state of Washington, we all want a good clean environment, but unless you own Bass Pro Shops or you own O'Reilly Automotive, or one of these businesses, and our median income is under the \$46,000 a year, it is pretty tough to explain to the folks back home that you have to put a cup in the storm waters that pass through Springfield, and dip it and make it palatable, and some of these ridiculous regulations.

I think I am over my time. I was going to yield my time back but I don't have any, Mr. Chairman. Thank you.

Mr. WHITFIELD. The gentleman yields back.

At this time, recognize the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair. And welcome to our panelists.

Since 1970, the Clean Air Act has had several key features that have helped make it one of the most successful environmental laws in the world. Science-based, health-protective standards keep our eye on the prize: healthy air for everyone. Cooperative federalism allows EPA to set the clean air goals, and allows states to decide how best to achieve them. EPA retains backstop enforcement authority, ensuring that every citizen in the United States receives a minimum level of protection, even if their state fails to act. Some have claimed that this arrangement violates the Tenth Amendment, and I quote, "If a state fails to formulate a plan, EPA will mandate a federal plan. This commandeering violates the Constitution under *New York v. U.S.*"

Professor Revesz, does the Clean Air Act state plan/federal plan provisions violate the Constitution?

Mr. REVESZ. It does not, and the reason is that states are not required to do anything. States are given the option to come up with state implementation plans, and if they don't, EPA can impose federal implementation plans on the sources of pollution. And because EPA imposes those directly on the pollution sources and not on state institutions, there is no Tenth Amendment problem.

The cooperative federalism arrangement under Section 111(d), as I indicated earlier, is exactly the same arrangement that has been in place since 1970 for meeting the national Ambient Air Quality Standards. EPA sets the reduction requirements in the National Ambient Air Quality Standards to define the maximum permissible concentration of pollution in the ambient air. The states can then decide how to allocate that reduction requirement among their sources through state implementation plans. And generally, they do, but sometimes they don't. And when they don't, EPA imposes federal implementation plans. And this system has been going on for decades. So the reason there isn't a Tenth Amendment problem is because EPA does not actually require the states to do these state implementation plans, it merely gives them the option to do

them. And 111(d) is exactly the same situation. Through its—the Clean Power Plan—the proposed rule in the Clean Power Plan, EPA has set a reduction requirement that applies to each state. Each state can now decide what to do. Each state is not forced in any way to do what EPA has suggested they do in the regulation. They can do whatever they want as long as they meet the reduction requirement. And if they choose not to do anything, and some states have said they won't, EPA can then impose a federal implementation plan. And the fact that some states have already said that they will not do it shows that there is no compulsion.

Mr. TONKO. Professor, would it be fair to say that “the existence of a backup federal plan takes the Clean Air Act outside the commandeering world,” just as the Supreme Court said in the radiation case of *New York v. U.S.*?

Mr. REVESZ. Yes, that is exactly right. And the New York case was problematic because there, the federal statute was requiring states to either take title to certain waste or adopt certain regulations—

Mr. TONKO. Well, I—

Mr. REVESZ [continuing]. Which is not the case here.

Mr. TONKO. Thank you. And I ask about these two statements because they were both made by Professor Tribe, and I sensed a bit of conflict there. Do you see any conflict between the two statements?

Mr. REVESZ. Well, there certainly is conflict between the two statements you mentioned now and Professor Tribe's position in his written submissions and in his testimony today.

Mr. TONKO. Thank you. And Professor Revesz, we are all hearing about these legal questions, about the EPA's ability to regulate greenhouse gases emitted from power plants. As you know, power plants are the largest source of uncontrolled CO₂ emissions in the U.S. I am not an attorney, but I thought the overall question of whether EPA had the authority under the Clean Air Act to regulate greenhouse gases was considered by the Supreme Court. I believe there were three separate cases: *Massachusetts v. EPA*; *American Electric Power v. EPA*; and *Utility Air Regulatory Group v. EPA*, and that the court ruled in favor of EPA regulation of greenhouse gases. In fact, the court in the *Utility Air Regulatory Group* case, talking about EPA regulation of power plants said that “the Act speaks directly to emissions of carbon dioxide from the defendant's plants.” So I just thought we should remember that and put it all in context. And any comments that you have in response—

Mr. REVESZ. No, I—

Mr. TONKO [continuing]. To those cases?

Mr. REVESZ. I totally agree, in the *Utility Air Regulatory Group* case that was decided last year, one of the issues was whether best available control technology could include the regulation of greenhouse gases, and the Supreme Court held that it could, and the reason that it could is because greenhouse gases were regulated air pollutants that endanger public health and welfare.

Mr. TONKO. Thank you very much.

With that, I see my time is up and I yield back.

Mr. WHITFIELD. Gentleman's time has expired.

I know that Mr. Tribe was trying to respond. Did you want to make a comment?

Mr. TRIBE. Right. I don't know whether you call it a point of personal privilege or whatever, but since I was quoted, the context was a statement I made in October of 2012. I was talking about something that bears no resemblance to the plan that was announced, proposed by the EPA on September 2014. I may have some ability to foresee the future, but not that much.

It is true that the existence of an otherwise unproblematic backup plan can take something out of the normal commandeering world, but here we have something that is much more like what the U.S. Supreme Court decided in *NFIB v. Sebelius*, was impermissible pressure on the states because preexisting help that the states are getting from the Federal Government to deal with air pollution, in places like Springfield, can be yanked when the state is recalcitrant and does not succumb to the Federal Government's demand that it meet certain goals.

In addition, the backup plan here, the reason I called it a phantom earlier is something that Professor Revesz said at page 13 of his prepared statement, he says it remains to be seen what a backstop federal implementation plan will look like. Now, what kind of alternative is it to tell a state either achieve these goals, and you can do it in any of several ways but none of them are voluntary, or we will do something to you and we won't tell you quite what?

Mr. WHITFIELD. OK.

Mr. TRIBE. It is not just putting a bullet to their head, it is making them play Russian roulette.

Mr. WHITFIELD. Thank you, Mr. Tribe.

Mr. REVESZ. If I could—

Mr. WHITFIELD. You want a personal privilege, Professor?

Mr. REVESZ. Yes, I would like that. That is the way that the Clean Air Act has worked for 45 years. Under the National Ambient Air Quality Standards, EPA can set state limitation plans. If they don't, the Federal Government can impose a federal implementation plan. The Federal Government does not say upfront what that federal implementation plan would look like—

Mr. WHITFIELD. Well—

Mr. REVESZ [continuing]. It waits until the states either submit a state implementation plan or not. Here, EPA is actually doing something it has never done before, which is favorable to the states. It has said we are going to give you early guidance and we are going to do it sometime in the next few months so you actually have some information, which is a lot more information than states have had under the kind of bread and butter of the Clean Air Act for the last 45 years.

Mr. WHITFIELD. And we have another panel coming up after you all that will be getting into this also.

At this time, I would like to recognize the gentlelady from North Carolina, Mrs. Ellmers, for 5 minutes.

Mrs. ELLMERS. Thank you, Mr. Chairman. And thank you to our panelists for being here today on this subject.

I would like to, you know, focus in, you know, we are talking about our states, and in North Carolina, North Carolina is going to be negatively impacted by the increased utility bills. I know we

have already discussed whether or not that will take place over time, but as it plays out I do believe that will be the case, and obviously, this interpretation of Section 111(d) of the Clean Air Act.

With that, I would like to ask Professor Tribe and Ms. Wood, the EPA maintains that the rule is very flexible. How would you describe the rule in just a few words, because I know we have kind of gone over this subject a bit, and I have a very particular question I would like to ask all of you in the remainder of my time?

Mr. TRIBE. Well, I would say that the flexibility is an illusion. In fact, the Attorney General of Michigan, in comments filed with the EPA in November of last year, warned that the plan really takes meaningful freedom away from the states—

Mrs. ELLMERS. Yes.

Mr. TRIBE [continuing]. And has just a patina—

Mrs. ELLMERS. Yes.

Mr. TRIBE [continuing]. Of flexibility.

Mrs. ELLMERS. Yes.

Mr. TRIBE. It is like the example I gave, your money or your life, but you can pay—

Mrs. ELLMERS. But you can pay—

Mr. TRIBE [continuing]. By cash or by check.

Mrs. ELLMERS [continuing]. You can choose any vehicle as long as you choose a black one, that kind of thing.

Mr. TRIBE. Right. Very much like that.

Mrs. ELLMERS. Ms. Wood, and to that one, do you feel it is flexible, but then also as a Clean Air Act practitioner, how would North Carolina or any other state be able to actually implement this rule?

Ms. WOOD. Yes. The flexibility is exactly as Professor Tribe described it, it is illusory, and the example I like to use in describing the flexibility is it is as if I came to you, the State of North Carolina, and I said I want you to give me change for a dollar. You can do it any way you want. It can be 100 pennies, it can be four quarters, I don't care, you just do it, North Carolina, the way you want. Well, the problem is North Carolina only has 60 cents, and so there really isn't flexibility there.

Mrs. ELLMERS. Right. So in other words, with the—got it.

Now, to that point, I want to go into something very specific because I think, there again, I know we have been debating law and the interpretation. I am a nurse and I am much more practical when it comes to these things. So what I would like to know is, based on this 111(d) provision, in building block number four, which is relating to the increased energy efficiency, how would this be enforced?

And I will start with you, Professor Tribe, and then just go to each one of you.

Mr. TRIBE. I would rather defer, if I could, because she is—

Mrs. ELLMERS. That is fine. That is fine. Ms. Wood.

Mr. TRIBE. She is more of an expert in the intricacies than I am.

Mrs. ELLMERS. OK.

Mr. WOOD. That gets to the essence of the problem of this rule which is that it goes beyond the source, as I have talked about today. There is no mechanism in the Clean Air Act for you to go and require people to reduce their electric consumption.

Mrs. ELLMERS. And basically, what we are talking about here is we are not talking about the state now or penalizing the state, we are talking about individuals. We are talking about individual households, we are talking about individuals who may or may not be complying with these regulations.

Ms. WOOD. Exactly. So either you are going to hold the individuals directly responsible, which isn't permissible under the Clean Air Act, or you are somehow going to try to force the electric utility companies to make—

Mrs. ELLMERS. To—

Ms. WOOD [continuing]. Their customers do it.

Mrs. ELLMERS [continuing]. Enforce. Correct.

Professor Revesz, would you like to comment on this?

Mr. REVESZ. Sure. As I indicated earlier, I mean the product here, what is being regulated is electricity delivered in usable form to consumers.

Mrs. ELLMERS. To consumers.

Mr. REVESZ. Consumers. Now, I don't think EPA is arguing that consumers should use less electricity, or take the bus one day a week or work at home, or anything like that.

Ms. WOOD. That is absolutely building block four.

Mrs. ELLMERS. To the point.

Mr. REVESZ. That is an interpretation of building block four, and we can disagree with that but I don't think we will resolve it in the next 52 seconds.

Also, we shouldn't lose sight of the fact that nothing is being imposed on any state here.

Mrs. ELLMERS. OK, but there again, now—

Mr. REVESZ. These are very—

Mrs. ELLMERS [continuing]. Now I am just reclaiming my time. We have already determined it is not the state we are talking about. We are talking about the individuals are the users of this energy, the individuals. My question is how would you enforce this?

Mr. REVESZ. States in their plans can come up with reductions any way they choose. They don't have to do anything in particular. They can have trading schemes, they can enter into compacts with other states and have multistate schemes, they have a million different options in how they can do this. They don't have to do it this way.

Mrs. ELLMERS. But building block number four talks about the individual use.

Mr. REVESZ. The building blocks are used to determine the state reduction requirements. They are not imposing any requirement on any state or on anyone else, they are just a way of determining to what extent states can reduce their carbon dioxide emissions.

Mrs. ELLMERS. Thank you.

And I yield back the remainder of my time.

Mr. WHITFIELD. Gentlelady yields back.

At this time, I recognize the gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. FLORES. Thank you, Mr. Chairman. And I want to thank the panel for joining us today. This has been a fascinating discussion, particularly with respect to government overreach.

Professor Tribe, the question of Takings has come up in the course of this conversation today. Professor Revesz, a few minutes ago, indicated that it wasn't a problem, but you indicate that the rule's impact raises Fifth Amendment or Takings concerns. Can you tell us what you mean by that, can you expand?

Mr. TRIBE. What I mean I think is best illustrated by decisions that involve not only the Takings and Compensation Clauses, but the Due Process Clause. As the Supreme Court has held in a number of cases, including one where the EPA initially promised confidential treatment to pesticide makers and then pulled the rug out from under them, and another in which the United States Government offered companies more favorable accounting treatment if they would bail out failing S and Ls, and then reneged, in cases like that, the Supreme Court has found a doctrinal basis either in the Contract Clause or in the Due Process Clause or in the Takings Clause for saying that even though you haven't wiped somebody off the map entirely, you have left them with some value, if you lead them to take a course of action and then pull the rug out from under them, fairness requires some kind of compensation. And in particular, the way the coal companies have been led on here is well known, this was something that was encouraged by the government, and in particular, when they were forced to invest billions of dollars in meeting the requirements under 112 with respect to the hazardous pollutants, they were pouring money down a hole, and they were not told, guess what, it is all gone, because the state that you live in has no choice other than to put you out of business.

Mr. FLORES. Well, that sort of brings me to my next question related to 111(d). This seems to be on shaky legal ground already. It is already the subject of lawsuits that haven't been finalized yet.

And so, Ms. Wood, what happens if the states start implementing the final rule only to have the courts strike the rule down, and what do these states do, what if they have already started signing the contracts, people started breaking ground on investments, or making capital commitments for investments, what happens next?

Ms. WOOD. Yes. There are two sets of harm that can happen here; one is to the states and the other is to the power plants—

Mr. FLORES. Correct.

Ms. WOOD [continuing]. Themselves. And when you are looking at the states, they are having to start now to prepare these plans. In the litigation that is pending, the state of Alabama, for example, submitted an Affidavit that said that this was by far the most complex undertaking that the state of Alabama Environment Department had undertaken in 40 years. So it is a lot of capital being expended to come up with these plans.

Most states are going to need to enact legislation and put in place regulations. So if at the end of that time period, this is all found to be unlawful, well, all of that effort will have been lost, but more importantly to the extent legislation and regulations have been put in place, all of that is going to have to be reversed, and, you know, that is also going to be time-consuming. And then as you said, power plants need to start planning now and so they can enter into contracts and could have financial—

Mr. FLORES. Right, but it goes unsaid here but is obvious is that the consumers and the taxpayers and ratepayers all bear the cost to that.

Continuing on Section 111(d), it is the basis for the Clean Power Plan that the EPA has come up with, but this provision as I understand it has seldom been used in EPA's 44-year history. The Supreme Court also recently said it is skeptical when an agency claims to discover in a long, long exigent statute, an unheralded power to regulate a significant portion of the U.S. economy.

And so, Ms. Wood, another question for you. Isn't it correct that in the 1990 amendments to the Clean Air Act, only one section of 111(d) regulation has been promulgated that still exists?

Ms. WOOD. Yes, that is correct. As Professor Tribe has talked about, there was one version of Section 111(d) that was actually promulgated. It is the House version, it is what is shown right now in the United States Code, and it precludes regulation of source categories under 111(d) if they are already regulated under 112.

Mr. FLORES. Well, and that was sort of my next question, as these have always had very limited reach.

Ms. WOOD. Yes, very limited reach. It really was designed by Congress to be a catch-all for something that slipped through the cracks. These sources are not slipping through the cracks, they are being regulated under 112 and having to install maximum achievable control technologies.

Mr. FLORES. Right. So there has never been an expansive use of 111(d) like this that we are proposing.

So, Professor Tribe, would you like to comment?

Mr. TRIBE. I agree.

Mr. FLORES. And you have 2 seconds.

Mr. TRIBE. It has only been used for four pollutants and five sources. They are very specialized and localized, like municipal waste landfills or sulfuric acid plants, which give off acid mist, and the idea that it is nothing new, just business as usual is the most fantastic account I have heard.

Mr. FLORES. OK. Thank you very much. I yield back.

Mr. WHITFIELD. Gentleman yields back.

At this time, recognize the gentleman from Mississippi, Mr. Harper, for 5 minutes.

Mr. HARPER. Thank you, Mr. Chairman. And thanks to each of you for being here. You have been very informative, and it is a challenging issue to every one of our states, a very expensive issue and proposition that is here. And the discussion on the Constitution is certainly very intriguing. And yesterday I saw in the vault at National Archives the original handwritten letter that Thomas Jefferson wrote following the Louisiana Purchase, congratulating Congress on this new acquisition, which had not been approved yet. And him being a strict constructionist, he was obviously concerned about people calling it unconstitutional, and he said it was extra-constitutional. So, it is amazing how we have progressed in 200 years, and how we look at things.

But, Professor Tribe, EPA and proponents of this regulatory approach say Section 111(d) serves as a catch-all that provides regulatory authority to ensure there are no gaps in air pollutant regula-

tions. And I know we have touched on it, but what are your thoughts about this gap-filling argument?

Mr. TRIBE. Well, it is the job of Congress to fill gaps in the law, and it tried to fill the little cracks, as Ms. Wood suggested, not in a huge gap, when it passed 111(d); little things that just weren't covered because they were not among the 188 hazardous pollutants that are regulated under 112 at the source. But the idea that when an agency is not satisfied with the coverage of a law, it can sort of squeeze the law so that the hole in the legal ozone layer is sort of closed up is just totally fantastic.

Mr. HARPER. Well, Professor Tribe, following that line, have you identified any evidence that Congress intended to provide EPA powers to expand its own regulatory authority when EPA identifies the need to do so, and how would that be possible under the Constitution?

Mr. TRIBE. Well, I think it wouldn't be possible, and I have found no such evidence.

Mr. HARPER. OK, thank you.

Ms. Wood, I think everybody agrees that EPA has the authority under certain circumstances to set standards that people comply with by installing certain equipment, for example, catalytic converters have been added to cars to meet environmental regulations. How is EPA's proposed 111(d) rule different than that?

Ms. WOOD. Yes. Well, it is different in the ways that I have discussed, which is it is going beyond the source of pollution, and the bulk of the reductions that EPA is claiming from this rule are not actually coming from the source, they are coming from other areas.

This is the first time in its history that EPA has ever tried to apply any part of 111 in this manner. Rather than being a standard of performance, in other words saying how a source should perform and at what rate it should emit, it is really a standard of non-performance. Let us try to figure out ways where these plants don't have to run. It is completely backwards and upside-down. Nothing has ever been done like this, and in fact, if you think about it, if you are looking for the best system of emission reduction, which is what EPA does, not running it or shutting it down would always be best, and yet that is never what they have found before.

Mr. HARPER. Thank you very much.

Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. WHITFIELD. The gentleman yields back.

And that concludes our questions, and I want to thank the three of you for taking time to be with us and discuss this very important issue with a lot of profound impacts down the road. So, Professor Tribe, thank you. Ms. Wood, Professor Revesz, thank you. We look forward to continuing to work with you on this issue and others.

And with that, we will release the first panel.

Mr. TRIBE. Thank you, Mr. Chairman.

Ms. WOOD. Thank you, Mr. Chairman.

Mr. WHITFIELD. Thank you so much. Thank you.

And I would like to call up the second panel now, who have been very patient. And on this panel, we are going to really zero-in on the practical impacts at the state level, and what their thoughts are about this proposed rule.

And we have four witnesses: Mr. Craig Butler, Ms. Kelly Speakes-Backman, Mr. Art Graham, and Mr. Donald van der Vaart. So if you all would take your seats. And just like the first panel, I will introduce each one of you right before you give your opening statement. I do think it is important that everybody understand that today is Mr. Art Graham's birthday, so he is a fun-loving guy and that is why he is here today—to celebrate his birthday.

But our first witness is Mr. Craig Butler, who is the Director of the Ohio Environmental Protection Agency. Mr. Butler, thank you for being with us, and you are recognized for 5 minutes for a statement. And at the end of that time, we will have questions for you.

STATEMENTS OF CRAIG BUTLER, DIRECTOR, OHIO ENVIRONMENTAL PROTECTION AGENCY; KELLY SPEAKES-BACKMAN, COMMISSIONER, MARYLAND PUBLIC SERVICE COMMISSION, AND CHAIR, BOARD OF DIRECTORS, REGIONAL GREENHOUSE GAS INITIATIVE, INC.; ART GRAHAM, CHAIRMAN, FLORIDA PUBLIC SERVICE COMMISSION; AND DONALD VAN DER VAART, SECRETARY, NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

STATEMENT OF CRAIG BUTLER

Mr. BUTLER. Good morning, Mr. Chairman, Chairman Whitfield, members of the committee. I do appreciate the opportunity to testify before the subcommittee.

My name is Craig Butler. I am director of the Ohio Environmental Protection Agency, and I have been asked to provide testimony on Ohio's comments and interpretation of the Clean Power Plan.

As reflected in our detailed comments, and extensive comments to U.S. EPA, the proposal seeks to overhaul the Nation's power generation, transmission, distribution systems, by reducing coal-based electricity, and instituting federally-mandated reliance on energy efficiency, renewable energy under the guise of global climate protection.

It is no secret, as we have heard today, that many states including Ohio, that the Clean Power Plan is encumbered with significant legal problems and should not go forward. While I am not here and won't discuss those concerns in detail, be assured that Ohio will continue to pursue these challenges either independently or joining with other states to prevent the likely illegal rulemaking from moving ahead.

U.S. EPA's request for comment on more than over 500 different aspects of the proposed rule as it was published in the Federal Register, combined with the inability to answer basic questions throughout that comment period, clearly highlights that the plan has not been well designed and was rushed out the door to meet a predetermined schedule. Nonetheless, Ohio felt a strong obligation to dissect the proposed rule from a very technical standpoint. We took it very seriously. We partnered with our Public Utilities Commission of Ohio, and conducted an extensive outreach effort to interested parties during the comment preparation. Our detailed review produced more than 180 pages of technical comments.

One major flaw is how U.S. EPA inexplicably ignores efficiency improvements already made to our coal-fired power plants, and instead orders sweeping new changes or improvements, regardless of feasibility. For example, U.S. EPA plan requires an achievement of 4 percent or 6 percent efficiency improvement at all coal plants. We know this was established without any site-specific assessment in Ohio. In reality, Ohio's coal fleet will have recognized a 5.4 percent heat rate improvement between 1997 and 2016, and as a result of additional reductions, may be very costly or if not impossible. In fact, carbon emissions will be reduced by 47 percent between 2005 and early 2016 from our power plants, yet U.S. EPA's allocation allocates no credit in the Clean Power Plan for pre-2012 "early adopters" of energy efficiency improvements, increasing cost to achieve new state regulatory targets and threatening more closures of coal plants in Ohio.

Ironically, after coal-fired units are required to make new costly upgrades, their ability to recover the costs in the marketplace is minimized by utilization restrictions as a result of the remaining EPA building blocks requiring natural gas plants to achieve a 70 percent utilization rate. It is nonsensical to force costly upgrades on one hand, and only deny the same units the ability to run and pay for them.

In another example, we believe U.S. EPA has misapplied the economic feasibility analysis to predict the reliability on the bulk power system. It is not clear if U.S. EPA may have consulted with the Department of Energy, North American Electric Reliability Corporation, Federal Energy Regulatory Commission, or power providers to identify and use well-known technical modeling software to specifically design to analyze how changes in the transmission will be affected. However, these organizations currently responsible for maintaining the grid and stability and reliability have warned of outages and voltage collapse if the plan is implemented as proposed. To Ohio, this signals that U.S. EPA failed to consult these organizations in a meaningful way while formulating this plan, and does not fully understand the implications of the plan.

As Ohioans discuss this issue across the state, we hear one overriding concern: maintaining our affordable, reliable power is critical to both the pocketbooks of Ohioans and continued economic development within our state. Ohio has been a manufacturing hub in the heart of this country since the Industrial Revolution. Fueled by electricity, which remains 9 percent below the national average, Ohio is home to a broad range of energy-intensive industries, and is competitive on the national and global market. The Clean Power Plan, with all its legal and technical flaws, presents a direct threat to these benefits to the Ohio consumer.

One stunning statistic I will share with you is the Public Utilities Commission conducted the detailed analysis of the Clean Power Plan and indicates that 39 percent higher electricity rates in calendar year '25 that will cost Ohioans \$2.5 billion. In the last 4 years, Governor Kasich has supported an energy policy that is inclusive of all sources in generation. From our world-class energy summit in 2011, where we discussed developing a broad portfolio of the cost-effective sources, to recent legislative activity to include combined heat and cogeneration in our qualifying energy sources,

we have and will continue to embrace the often overused but certainly relevant all-of-the-above strategy. We do it because it is important to affordable, reliable energy and to protect the environment.

I will close by saying Ohio is willing and is very prepared to participate in a full national debate on carbon, the need or not, frankly, to regulate carbon emissions from power plants, and how Ohio is and remains committed to being a good steward of the environment. However, the Clean Power Plan is a seriously flawed proposal and should not be used to set unprecedented national policy. U.S. EPA should reconsider this misguided approach.

Thank you.

[The prepared statement of Mr. Butler follows:]



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

**Testimony of Craig Butler
 Director of Ohio EPA
 Before the U.S. House of Representatives
 Energy & Power Subcommittee
 March 17, 2015**

Good morning, Chairman Whitfield and members of the committee. I appreciate the opportunity to provide testimony to this subcommittee.

My name is Craig Butler, Director of the Ohio Environmental Protection Agency. I have been asked to provide testimony on Ohio's comments and interpretations of U.S. EPA's proposed Clean Power Plan. As reflected in our detailed and extensive comments to U.S. EPA, this proposal seeks to overhaul the nation's power generation, transmission and distribution system by reducing coal-based electricity and instituting federally mandated reliance on energy efficiency and renewable energy under the guise of global climate protection.

It is no secret to many states, including Ohio, that the Clean Power Plan is encumbered with significant legal problems and should not go forward. While I am not here to discuss these concerns in detail, be assured Ohio will continue to pursue these challenges either independently or by joining other states to prevent this likely illegal rulemaking from moving ahead.

U.S. EPA's request for comment on more than 500 different aspects of the proposed rule, as published in the Federal Register, combined with their inability to answer basic questions throughout the comment period, clearly highlights that this plan has not been well designed and was rushed out the door to meet a predetermined schedule. None-the-less, Ohio felt an obligation to also dissect the proposed rule from a technical standpoint. We took this seriously and partnered closely with the Public Utilities Commission of Ohio and conducted an extensive outreach effort to interested parties during our comment preparation. Our detailed review produced more than 180 pages of technical comments.

One major flaw is how U.S. EPA inexplicably ignores efficiency improvements already made at coal-fired power plants and, instead, orders sweeping new "improvements," regardless of feasibility. For example, U.S. EPA's plan requires an achievement of 4 percent or 6 percent efficiency improvement at all coal plants. We know this was established without any site-specific assessments in Ohio. In reality, Ohio's coal-fired fleet will have recognized a 5.4 percent heat rate improvement between 1997 and 2016, and as a result additional reductions will be very costly for Ohio's fleet, if not impossible. In fact, carbon emissions will be reduced by 47 percent between 2005 and early 2016 from Ohio's power plants. Yet U.S. EPA allocates no credit for pre-2012 "early adopters" of efficiency improvements, increasing costs to achieve new state targets and threatening more closures in Ohio.

Ironically, after coal-fired units are required to make new, costly upgrades, their ability to recover costs in the marketplace is minimized by utilization restrictions as a result of the remaining U.S. EPA building blocks and requiring natural gas plants to achieve up to a 70 percent utilization rate. It is nonsensical to force costly upgrades on one hand, only to deny these same units the ability to run and pay for these upgrades.

In another example, we believe U.S. EPA misapplied their economic feasibility analysis to predict the reliability impact on the bulk power system. It is not clear if U.S. EPA may have consulted the Department of Energy, North American Electric Reliability Corporation, Federal Energy Regulatory Commission or power providers to identify and use well known, technical modeling software specifically designed to analyze how changes to the bulk power transmission and distribution system affect reliability. However, of these organizations currently responsible for maintaining grid stability and reliability, several have warned of outages and "voltage collapse" if this plan is implemented as proposed. To Ohio, this signals that U.S. EPA failed to consult with these organizations in a meaningful way while formulating this plan and does not fully understand the implications of this plan.

As Ohioans discuss this issue, we hear one overriding concern; that maintaining affordable, reliable power is critical to both the pocket books of Ohioans and the continued economic development within the state. Ohio has been a manufacturing hub in the heart of the country since the industrial revolution. Fueled by electricity, which remains 9 percent below the national average, Ohio is home to a broad range of energy-intensive industries and is competitive in the national and global marketplace. The Clean Power Plan, with all its legal and technical flaws, presents a direct threat to these benefits to Ohio consumers.

One stunning statistic I will share with you is that the Public Utilities Commission of Ohio conducted a detailed analysis of the Clean Power Plan and predicted wholesale market energy prices to be 39 percent higher in calendar year 2025, costing Ohioans approximately \$2.5 billion. Additional significant costs also are predicted, including increases in capacity pricing and significant investments in upgrading the transmission system, but are not included in this figure.

In the last four years, Governor Kasich has supported an energy policy that is inclusive of all sources of generation. From our world-class energy summit held in 2011 where we discussed developing a broad portfolio of cost-effective energy sources in Ohio, to recent legislative activity to include combined heat/ cogeneration to Ohio's list of qualifying energy sources. We have and will continue to embrace the often overused but certainly relevant "all of the above" energy strategy. We do this because we understand how important it is to provide affordable and reliable energy.

Ohio is willing and prepared to participate in a full national debate on carbon, the need (or not) to regulate carbon emissions from power plants, and how Ohio is and remains committed to being a good steward of the environment. However, this U.S. EPA Clean Power Plan is a seriously flawed proposal and should not be used to set unprecedented national policy. U. S. EPA should reconsider this misguided approach.

I am happy to answer any questions you may have. Thank you.



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

December 1, 2014

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mail code 28221T
Attn: Docket ID No. EPA-HQ-OAR-2013-0602
1200 Pennsylvania Ave. NW.
Washington, DC 20460

RE: Ohio EPA Comments on U.S. EPA's June 18, 2014 "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule" [79 FR 34830]

Dear Ms. McCarthy:

The Ohio Environmental Protection Agency (Ohio EPA) is providing comment on the above referenced U.S. EPA proposed rule regarding emission guidelines for states to follow in developing plans under Clean Air Act (CAA) Section 111(d) to address greenhouse gas emissions from existing fossil fuel-fired electric generating units (EGUs). Ohio EPA appreciates the opportunity to comment on this very significant proposal.

The U.S. EPA proposal calls for the massive and unprecedented overhaul of the power generation, transmission and distribution system to limit carbon dioxide emissions under the stationary source control program of Section 111(d) of the Clean Air Act. U.S. EPA requested comments on 497 different aspects of the rule in the federal register notice which reflects the widespread impacts and complexity of the undertaking by U.S. EPA. Although U.S. EPA extended the original comment period and Ohio EPA is supplying extensive comments, this proposal requires additional scrutiny that could not be completed in the allotted time, particularly when U.S. EPA issued additional modifications to the proposal toward the end of the comment period. These additional modifications occurred on October 30, 2014 [79 FR 64543] and November 13, 2014 [79 FR 67406] without any extension to the comment period or revision of the expected date for release of the final rule.

Ohio utilities have significantly reduced carbon dioxide emissions from electric generation from 2005. Since 2005, Ohio has reduced carbon dioxide emissions from 138 million tons to 107 million tons in 2013. Further reductions due to shut downs resulting from the Mercury Air Toxics Standard could result in as much as an additional 33.8 million tons of carbon dioxide reductions between 2015 and 2016. These reductions were accomplished without a federal mandate to reduce emissions of carbon dioxide or a multistate agreement. Even after this dramatic reduction, U.S. EPA demands additional reductions that will unnecessarily threaten electric reliability, reduce manufacturing and coal mining employment, and increase electric rates.

In Ohio and other states, the reliability of the power generation, transmission and distribution system is of utmost importance and failures in the grid can cause immediate detrimental health and economic consequences. Some of the organizations that have actual responsibility for maintaining grid stability and reliability have warned of "cascading outages" and "voltage collapse" if this plan is implemented as proposed, yet it appears from the public record U.S. EPA has failed to consult with these organizations in a meaningful way on the formulation of this plan.

Ohio EPA has analyzed the proposal and found it lacking in legal authority. Because U.S. EPA has promulgated a Maximum Achievable Control Technology standard under Section 112 for power plants, U.S. EPA is prohibited from regulating carbon emissions from these same power plants under the plain language of Section 111(d). U.S. EPA is also limited in Section 111(d) to regulate sources which would be regulated under Section 111(b) if the source had been "new". This proposal inappropriately requires states to exert regulatory authority and impose obligations on "affected entities" which potentially include countless generators and users of energy throughout the state. Many of these "affected entities" lie "outside-the-fence" of an EGU and may not even own any air pollution sources. U.S. EPA has taken a rarely-used section of the CAA that has always been applied on a source-oriented "inside-the-fence" basis as justification to expand their regulatory reach and exert authority over the national power generation, transmission and distribution system. U.S. EPA has misinterpreted Congressional silence to imply that Congress would agree to the broad new authority proposed in this rule.

Ohio EPA's review also finds this proposal to be technically infeasible and the timeframe being demanded by U.S. EPA is unachievable. The following highlights the major issues of the proposal that are discussed in detail in the comments presented below:

- A. While U.S. EPA publicly referenced a baseline of 2005 for reduction of carbon dioxide emissions, 2012 is used throughout the proposed rule to establish state goals. Ohio EPA reinforces the need for states to independently select an appropriate baseline period that best represents their individual states circumstances.
- B. The reductions of either 4% or 6% from EGUs required from Building Block 1 are technically infeasible. The company that authored the primary study that

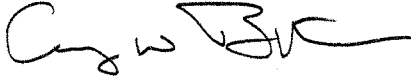
U.S. EPA relies on for this element has raised issue with the application of the study in the manner that it is being used.

- C. The conversion of the current economic electricity dispatch model to an emission dispatch model to the level proposed by U.S. EPA in Building Block 2 is infeasible and counterproductive by attempting to turn base load coal-fired power plants into peaking units and natural gas-fired peaking units into base load plants. This works directly against the heat rate improvements demanded in Building Block 1 by reducing the efficiency of coal-fired electric generating units.
- D. The required reductions from renewable sources under Building Block 3 (13.8 million MW-h by 2029) were derived from erroneous assumptions on current state law and developed by grouping Ohio with dissimilar states.
- E. The required reductions from energy efficiency measures under Building Block 4 (16.3 million MW-h by 2029) are not realistic over the long term and require a continuing obligation by states and local governments beyond 2030.
- F. The proposal by U.S. EPA conflicts with or interferes with; the CAA, the Federal Power Act, the Administrative Procedures Act, the Unfunded Reform Mandates Act, and the U.S. Constitution.
- G. The timing allowed for states to develop and submit plans for the complete overhaul of the power generation, transmission and distribution system is entirely inadequate from both a technical and procedural standpoint. Most states will require additional legislation and this proposed plan does not allow time for states to perform the detailed technical analysis, for legislation to be enacted, nor for the appropriate administrative agencies to propose rules. The demands placed on states to obtain a one-year extension are enormous and require unreasonable commitments that prevent states from altering existing programs.
- H. The claimed flexibility for states to choose among compliance options in the proposal is not evident. As proposed, each of the building blocks that U.S. EPA uses to develop the state goal will be extremely difficult to achieve. As a result, very little practical flexibility exists for the states. Other alternative methodologies suggested by U.S. EPA to obtain carbon dioxide reductions are equally unworkable. This lack of flexibility is discussed throughout Ohio EPA's comments.

In closing, Ohio EPA requests that U.S. EPA conduct a comprehensive review and assessment of our comments. Ohio EPA believes the entire proposal should be reconsidered. Ohio EPA has an obligation to be good stewards of the environment, and

we support having a robust energy policy that is protective of public health and air quality. However, U.S. EPA's proposed Clean Power Plan is technically flawed, not legal and unworkable in its current form.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig W. Butler', with a stylized flourish at the end.

Craig W. Butler
Director

Cc: Robert Hodanbosi, Chief, Ohio EPA Division of Air Pollution Control

Executive Summary

U.S. EPA proposes to revamp the entire power generation, transmission and distribution system by using Section 111(d) of the Clean Air Act (CAA), a rarely-used section that reserves much authority and flexibility to the states. The U.S. Supreme Court has held that vast regulatory expansions can only stem from clear Congressional authorization. Through its proposed Section 111(d) rulemaking, U.S. EPA is seeking to broadly expand its regulatory reach from emission control to power generation, transmission and distribution control without having the clear authority under the CAA.

As a result, Ohio EPA has reached out extensively to entities that would be regulated under this proposal; other state agencies that will undoubtedly be impacted; state, federal and private organizations with expertise in electricity production and distribution; and numerous other stakeholders, such as environmental organizations. This outreach effort proved essential to understanding the ramifications of this proposal to Ohio and in forming Ohio EPA's comments.

Overall, Ohio EPA has reviewed this proposed regulation and is providing both legal and technical comments. Ohio EPA did not focus on the stated objectives related to climate change, but rather provides a sound detailed analysis on the proposal's cost to consumers, projected impact on power system reliability, as well as identifies omitted information and specifically identifies our concerns regarding the inappropriate use of IPM to predict technical feasibility, reliability and cost-effectiveness. Below are a summary of our findings.

General Comments:

- Since 2005, Ohio has reduced carbon dioxide (CO₂) emissions from 138 million tons to 107 million tons in 2013. Further reductions due to Mercury and Air Toxics Standard (MATS) shut downs could result in as much as an additional 33.8 million tons of CO₂ reductions between 2015 and 2016.
- As a result of U.S. EPA's recent MATS, Ohio will lose roughly 30% of 2012's coal-fired generating capacity. As generating units install control equipment to comply with MATS, this CO₂ proposal layers an even greater degree of uncertainty on the industry.
- U.S. EPA failed to understand and recognize the unique circumstances of Ohio as a deregulated energy marketplace. Within the proposal U.S. EPA compares vertically integrated and deregulated marketplaces, however nowhere does U.S. EPA take these differences into consideration in establishing the best system of emission reduction.

Cost and Reliability:

- Ohio supports diversification of energy sources that responsibly maintain or increase reliability and provides predictable and low costs to consumers. This proposed rule jeopardizes these fundamental benefits to Ohio consumers.

- Currently, it is PJM Interconnection, LLC (PJM), as delegated by the Federal Energy Regulatory Commission (FERC) through the Federal Power Act, whom determines dispatch order by utilizing the least expensive resource first to meet energy demand. Nowhere is U.S. EPA delegated authority for states to usurp the Federal Power Act and mandate generation dispatch based on CO2 emissions rather than cost.
- U.S. EPA disregarded specific and detailed concerns from entities responsible for guaranteeing grid stability. To move forward with a proposed rule without adequately addressing these issues is ill advised. For instance:
 - o The analysis includes no state-specific capability assessment for electricity or natural gas generation, transmission or distribution.
 - o A third party cost-based model was inappropriately used as the lone justification for demonstrating nationwide power grid stability and security.
 - o FERC testified to Congress regarding serious concerns about the impact of this rule on reliability. A proposal of this breadth and impact should rely on FERC, the North American Electric Reliability Corporation (NERC), regional transmission organizations and state Public Utility Commission (PUC) expertise during the early planning and development stage, yet this proposal includes major deficiencies for which these entities have clear authority.
 - o One regional transmission organization responsible for dispatching power across multiple states predicts potential "rolling blackouts" and worse, "cascading outages and voltage collapse".
- Despite a dramatic increase in predicted natural gas usage dedicated to generating electricity, no legitimate analysis of the subsequent impact on natural gas supply and/or prices was conducted.
- In this proposal renewable energy is expected to occupy an ever larger portion of electricity generation. U.S. EPA recognizes the intermittent nature of generation from renewables, yet relies on unproven grid storage technologies to provide quick response backup generation. Reliance on unproven technology, described by the Department of Energy as still in it's "infancy" will undermine grid reliability.
- NERC completed an Initial Reliability Review of U.S. EPA's proposal. Their concerns include:
 - o As directed by the Energy Policy Act of 2005, NERC is directed to conduct periodic assessments of the reliability and adequacy of the bulk power system in North America. U.S. EPA should have consulted, utilized and relied on NERC's knowledge and experience prior to releasing a proposed rule.

- o By not consulting NERC and, instead, explaining that reliability is not a concern because states have "flexibility" in plan development demonstrates a lack of understanding and due diligence on behalf of U.S. EPA.
- o NERC's analysis provides fundamental recommendations for implementing a more timely approach that addresses: resource adequacy and infrastructure deployments; continued assessment of implications by NERC and independent evaluations; coordinated regional and multi-regional evaluation of interdependencies between systems; more accounting for time to plan and build transmission infrastructure; development of a reliability assurance mechanism; assessment and planning for a changing resource mix.
- U.S. EPA's cost analysis is flawed and radically underestimates the projected cost of electricity from this proposal.
 - o Ohio's PUC conducted a state-specific analysis which showed the aggregate total price increase as a result of the Clean Power Plan will be substantial. Compliance with Building Block 2 would cost Ohioans approximately \$2.5 billion (in nominal dollars) more for electricity in 2025 alone.
 - o In a misguided approach to bring costs down, after a notable predicted increase in costs, U.S. EPA relies heavily on renewable energy and energy efficiency development to bring down costs by 2030.
 - o Many Ohio industries depend on affordable power. It is the back bone of Ohio's high quality of life and crucial for business development and expansion. Any increase in electricity and/or natural gas costs is viewed as a threat to their economic viability in Ohio.

Legal:

- Because U.S. EPA has promulgated a Maximum Achievable Control Technology standard under Section 112 for power plants, they are prohibited from regulating CO2 emissions from these same power plants under the plain language of Section 111(d).
- U.S. EPA is limited in Section 111(d) to regulate sources which would be regulated under Section 111(b) if the source had been "new". This proposal inappropriately requires states to exert regulatory authority and impose obligations on "affected entities" which potentially include countless generators and users of energy throughout the state. These "affected entities" would potentially include any renewable energy development, any energy efficiency measures, and industrial users of energy and entities located outside of Ohio.
- U.S. EPA has taken a rarely-used section of the CAA that has always been applied on a source-oriented inside-the-fenceline basis as justification to expand

their regulatory reach and exert authority over the national power generation, transmission and distribution system. U.S. EPA has misinterpreted Congressional silence to imply that Congress would agree to the broad new authority proposed in this rule.

- A companion proposal to regulate Modified or Reconstructed sources under Section 111(b) mandates that sources previously included in a state's Section 111(d) "existing" source plan will be subject to both rules following modifications or reconstruction. This misapplication of the CAA would cause undo confusion and hardships on any source attempting to operate more efficiently.
- The provision in Section 111(d) for U.S. EPA to establish a procedure similar to that provided under Section 110 is only with respect to providing procedures for each state to submit a plan which establishes standards of performance. U.S. EPA cannot expand its authority under Section 111(d) with the wholesale adoption of Section 110 requirements.

Specific Comments on Elements of the Clean Power Plan:

Building Block 1:

- U.S. EPA is mandating a 4 to 6% heat rate improvement for coal-fired power plants through misapplication of a research study (Sargent & Lundy). The use of this study was in direct contradiction to the author's stated purpose and provides an over-simplification of the complexities and variability in coal plant design and function.
- U.S. EPA relies on fundamental flaws in their heat rate improvement justification and feasibility analysis. Specifically:
 - The study incorrectly assumed that heat rate variability beyond ambient temperature and load was under control of the operator.
 - The "presumption" that all heat rate improvements were due to equipment upgrades without any technical basis or situational knowledge.
 - No attempt to recognize that heat rate improvements have already been made at many plants.

These oversights, along with other inadequacies, demonstrate that the best system of emission reduction can only be implemented through unit-specific engineering studies without the burden of federal predetermined conclusions.

- Specifically, application of 4 to 6% heat rate improvement is unrealistic for Ohio. Ohio's coal-fired fleet had an average gross heat rate of 9,788 BTU/kW-h for years 1997 to 2013. Absent this rule, Ohio's post-MATS coal fleet is projected to achieve a gross heat rate of 9,287 BTU/kW-h, representing a 5.4% heat rate improvement. After MATS shutdowns, Ohio's fleet will be extremely efficient and additional reductions will be very costly to achieve from the remaining fleet.

Building Block 2:

- 70% re-dispatch of power generation from coal to natural gas may exert severe strain on Ohio's natural gas distribution and transmission system. No formal capability study was conducted by U.S. EPA to assess the feasibility at the state level for implementing this shift.
- U.S. EPA did not recognize known impediments including designed use of natural gas combined cycle (NGCC) units as load-following versus base load units, and necessary unavoidable costly and time consuming upgrades to the transmission and distribution system.
- U.S. EPA inappropriately justified the feasibility of this capacity increase for every natural gas unit (and some that are not even planned yet) across the state based on isolated units that operate near 70%. Re-dispatch at 70% is described by U.S. EPA in the federal register as possible "not in every individual instance but on average...technically feasible". Indeed, U.S. EPA could only model 64% re-dispatch at the state level. Seventy percent re-dispatch could only be achieved under a regional approach. To determine if re-dispatch is possible and appropriate, a unit-by-unit review is necessary.

Building Blocks 3 and 4:

- As demonstrated by Ohio's existing Renewable Energy Portfolio Standard (RPS), Ohio supports development of renewable energy and energy efficiency programs. However, this new proposal and the associated federalization measures will disincentivize renewable energy and energy efficiency initiatives that states like Ohio have had success implementing at the state level.
- Federalization of renewable energy and energy efficiency is unacceptable. The prospect of U.S. EPA enforcement of all aspects of state plans will create a disincentive to public and private entities already making great strides in renewable energy and energy efficiency development. No entity we had discussions with during our review of this proposal, public or private, communicated their desire for this state-specific activity to be afforded to U.S.EPA.
- States' RPS programs are not uniform. U.S. EPA has provided no indication of how these differing states RPS programs would be incorporated and function under this proposal. States with existing RPS standards may need to adjust their state specific programs to meet U.S. EPA's standards. If not, states will need to duplicate all tracking, measuring, verification and reporting to separately satisfy both regulatory bodies.

Timing:

- U.S. EPA proposes unrealistic timing throughout the proposal. Less than six months is insufficient time to provide comment on a complete overhaul of the

country's power generation, transmission and distribution system. A proposal of this breadth and potential impact should take the form of a multi-year planning and good-faith outreach effort culminating in a proposal that is well researched and attainable. This proposal is none of these.

- For states, developing a comprehensive plan including development of new regulatory and statutory authority, development of a workable state specific plan, and submittal of a plan that meets U.S. EPA's expectations is improbable. To collaborate with other states on a multi-state plan within the time provided is likely unattainable.
- U.S. EPA incorrectly believes heat rate improvement projects at affected EGUs can be implemented and 70% utilization of NGCC units can be achieved by 2020. This is technically unrealistic.
- Ohio compiled several cradle-to-grave timelines of recent efficiency improvement projects at Ohio EGUs. With inclusion of initial planning, engineering, construction and testing, the most optimistic duration is twenty months plus any delays attributable to New Source Review permitting and acquisition of PJM approval. This twenty month timeline was the product of normal, routine, and well established outage schedules via PJM. A second timeline, involving turbine upgrades, required approximately seven years to complete.

Omission of Critical Information:

- This proposal is 129 Federal Register pages in length and references over 1000 pages of guidance documents. U.S. EPA has been unable to respond to fundamental state questions regarding plan feasibility, grid reliability and cost impacts for Ohio and Ohio generating units.
- U.S. EPA omitted numerous documents from the docket that would assist states in understanding their goal development, and impacts including multiple IPM parsed files, heat rate improvement analysis data, details regarding enforceability and evaluation, measurement and validation approvability. In addition, U.S. EPA's recently released NODA excluded data on reformulated state goals, cost analysis, technical analysis and other administrative elements.
- U.S. EPA was unable to provide meaningful guidance on a conversion of their CO₂ reduction goals from an emissions rate to mass emission target as requested by Ohio and many other states. Only in mid-November, after multiple requests from states and stakeholders, did U.S. EPA release guidance. To provide an acceptable conversion on a fundamental aspect of the proposal 2-3 weeks before the deadline is problematic. Ohio has commented on this but, simply did not have enough time to analyze the guidance and reconcile it appropriately with the rest of the proposal.

Use of a Flawed Model:

- The feasibility of re-dispatch under this proposal was only possible through the assessment of a “shadow” cost on each ton of CO2 emissions. Only through assessment of an added cost per ton, making increased use of natural gas more affordable than coal over the compliance period, is this proposal possible. U.S. EPA fails to explain where this added revenue stream will be collected, by whom and it's appropriate use.
- Ohio EPA has serious reservations concerning U.S. EPA's over reliance on the IPM model to predict the proposed rule's feasibility, cost to consumers and impact on reliability.
- IPM is a U.S. EPA-developed cost-based model used to determine the least-cost method of meeting energy demand. When inappropriately used as a dispatch model, severe limitations become evident that undermines reliability assessment capabilities. Problems include failure to represent congestion at the local level, failure to properly assess individual units, failure to recognize and account for seasonal variation, lack of detailed transmission and distribution information, inadequate accounting of the intermittent nature of renewable energy generation.
- Ohio EPA identified multiple errors and false assumptions throughout the IPM modeling scenarios which have been identified within this submission including, but not limited to, unrealistic heat rate improvements, overly ambitious renewable energy capacity coming online, significant and potentially unrealistic capacity factors at included coal-fired units, and a notable lack of natural gas expansion in the state.

Health and Climate Effects:

- U.S. EPA provided no scientific evidence of direct health effects of CO2 exposure in either the preamble or the supplementary support documents used to justify the proposal. U.S. EPA justifies enacting this new sweeping expansion of regulatory authority based upon vague links to preventing indirect possible impacts such as intestinal illness resulting from extreme weather impacts. This delegitimizes reasonable efforts to address the consequences of climate change.
- U.S.EPA's attempts to bolster justification and affordability of this proposed rule by identifying health benefits that will be recognized as a result of secondary reductions in criteria pollutants, not CO2. Implementation of current and future ozone, PM 2.5 and SO2 standards, and others, will reduce criteria pollutants in and of themselves, without this proposal.

Conclusion:

Climate change is a global issue and Ohio wants and believes we are already doing our part to address this important issue. However, U.S. EPA's proposal to address climate

change through this Section 111(d) approach is not appropriate. Not only does Ohio strongly believe that U.S. EPA is inappropriately using Section 111(d) to implement this plan, rather than securing authorization from Congress, but the proposal itself is fundamentally flawed in its design and construction and jeopardizes Ohio's ability to provide low-cost, affordable, and reliable power to our citizens.

Mr. WHITFIELD. Thank you, Mr. Butler.

And our next witness is Ms. Kelly Speakes-Backman, who is the Commissioner at the Maryland Public Service Commission, and Chair of the Regional Greenhouse Gas Initiative. Thank you for being with us, and you are recognized for 5 minutes.

STATEMENT OF KELLY SPEAKES-BACKMAN

Ms. SPEAKES-BACKMAN. Mr. Chair and members of the committee, thank you very much for inviting me—

Mr. WHITFIELD. Your microphone is on, and move it up closer please.

Ms. SPEAKES-BACKMAN. Thanks. I think it is with this chair.

Thank you very much for inviting me to testify this morning. I am grateful for this opportunity to comment on the proposal's costs, feasibility, and impact on consumers and electric reliability.

As an economic regulator first and foremost, my primary objective is to ensure that the environmental goals of my state are realized in the most cost-effective way possible, while maintaining grid reliability. To this end, I am pleased that the EPA has allowed states to work within the current construct of our electric grid markets by encouraging a regional approach to compliance. As one of the nine states participating in RGGI, the experience of my state as well as recent analyses completed by several independent grid operators indicates that a regional path to compliance is the most efficient and cost-effective path forward.

Together, our nine states continue to successfully implement the Nation's first fully-operational carbon market. The RGGI program caps emissions by first determining a regional budget of carbon dioxide allowances, then distributing a majority of the CO₂ allowances through regional auctions, so that states may capture the allowance value for reinvestment in strategic energy programs.

Our nine states represent 16 percent of the U.S. economy, and generate a total gross domestic product of \$2.4 trillion U.S. The states work together within the current electricity markets to create a unified system for auctioning and trading carbon allowances so that our environmental goals are achieved through a least-cost, market-based solution. Although we have collaborated effectively for the better part of a decade, the RGGI region remains diverse in many aspects. We comprise three separate regional transmission organizations, we have different political landscapes, and dissimilar generation profiles. For example, in Maryland, our generation remains predominantly coal. As part of RGGI, and coupled with other state energy initiatives, however, we have been able to diversify our fuel mix and reduce our carbon footprint. Since 2005, in-state generation from renewables, nuclear, and natural gas as a percentage of total generation mix has increased from 36 percent to 55 percent, while in-state generation from coal has decreased 56 percent to 44 percent. Over our entire RGGI region, the power sector carbon pollution has decreased by 40 percent, while our regional economy has grown by 8 percent. That is from 2005 to 2013. Non-hydro renewable generations has increased by 47 percent, while our regional dependency on coal and oil has decreased. Our carbon intensity of the power sector has decreased at twice the rate of the rest of the country.

So we believe that market forces, state policies, and programs, such as RGGI, are driving these cost-effective pollution reductions, while simultaneously supporting our local economies. Our energy efficiency, demand response, and renewable initiatives, as well as policies to encourage fuel switching and to less carbon-intensive fuels, all work in tandem to reduce pollution and establish long-term solutions for a reliable energy infrastructure. Many of the complementary strategic energy initiatives are funded using proceeds from these RGGI allowance auctions, creating a virtuous cycle of benefits that also serves to minimize ratepayer impact.

I could go through the rest of my written statement, but I would very much prefer to just leave you with five points that we have learned as part of RGGI, and I would be happy to take questions afterwards. The five lessons that we have learned and what we hope will be helpful to other states as they are crafting their plans, either state or regional, include the formation of—one of the lessons stems from the formation of our intra and interstate agency relationships as part of the regional cooperative effort. These relationships and resources have spilled over into other initiatives such as distributed generation, electric vehicles, and compliance with other EPA and state environmental regulations. Two is the pooling of staff resources and budgets. Basically, we can do a lot more with a lot less. We have been able to complete the necessary regional electric sector modeling in a timely fashion with built-in peer review. The third is a regional mechanism stimulates active and productive stakeholder engagement. The fourth, regional consistency does not require the states to implement identical programs. We in Maryland have one way of using these proceeds. Those in New York, those in Massachusetts, those in the other states participating in RGGI base their investments on their own state policies and priorities. And fifth, lastly and the most important lesson that we have learned by the RGGI states as it applies to the Clean Power Plan, is that participation in a regional compliance effort will likely provide other states with the most flexibility moving forward. Initial hurdles surrounding the structure of the mechanism are not, in fact, insurmountable as demonstrated by us and in the RGGI states. Using this regional construct, the regional emission cap is the only enforceable mechanism included in the compliance plan. States retain jurisdiction over their own energy efficiency and renewable energy programs, and can continue to offer these initiatives as complimentary measures that help mitigate the cost of compliance for their ratepayers.

Thank you very much for your time this morning.

[The prepared statement of Ms. Speakes-Backman follows:]

House of Representatives Committee on Energy and Commerce

Subcommittee on Energy and Power

Testimony on “EPA’s Proposed 111(d) Rule for Existing Power Plants: Legal and Cost Issues”

Kelly Speakes-Backman

Commissioner, Maryland Public Service Commission

Chair, Regional Greenhouse Gas Initiative, Inc. Board of Directors

Co Vice-Chair of the Energy Resources and Environment Committee, NARUC

March 17, 2015

Summary of Remarks:

- It is possible to achieve cost-effective pollution reductions while supporting local economic goals. The Regional Greenhouse Gas Initiative (RGGI) states have demonstrated the successful reduction of carbon pollution, while maintaining grid reliability, and while having a positive impact on ratepayers and our overall economies.
- Carbon pollution in the RGGI region has decreased by over 40 percent, while the regional economy has grown by 8 percent.
- The basic structure of EPA’s proposed rule is sound, although the RGGI states recommend that EPA adopt certain revisions to ensure that early action is recognized, and that the state targets are verifiable, transparent, equitable, and enforceable.
- Maryland’s experience and recent independent grid operator analysis indicate that a regional path to compliance with the Clean Power Plan is the most efficient and cost-effective path forward.
- Independent analysis on the economic impacts of RGGI concluded that investments from the RGGI program’s first three years are adding \$1.6 billion net economic value to the region; changes in 2014 are projected to provide an additional \$8 billion in gross regional product and add more than 130,000 job-years.
- By 2013, Maryland accounted for more than \$230 million of this regional investment, directing 85 percent of the State auction proceeds toward energy efficiency and direct bill assistance.
- Through participation in RGGI, Maryland has accumulated lessons that may be instructive to other states as they investigate their options for compliance with the Clean Power Plan.

Thank you Chairman Whitfield, Ranking Member Rush, and other members of the subcommittee for inviting me to testify this morning. As a Commissioner of the Maryland Public Service Commission, and as the Chair of the RGGI, Inc. Board of Directors, I am grateful for the opportunity to provide testimony on this crucial and timely subject. I particularly appreciate the opportunity to comment on the proposal's costs, feasibility, and impacts on consumers and electric reliability from the perspective of a state regulator.

As an economic regulator first and foremost, my primary objective is to ensure that the environmental goals of my State are realized in the most cost-effective way possible while maintaining grid reliability. To this end, I am pleased that the EPA has allowed states to work within the current construct of our electric grid markets, by encouraging a regional approach to compliance. As one of the nine states participating in the Regional Greenhouse Gas Initiative (RGGI), the experience of my State, as well as recent analysis completed by several independent grid operators, indicates that a regional path to compliance is the most efficient and cost-effective path forward.

Maryland is one of the nine states participating in RGGI – a flexible, cost-effective program designed to reduce carbon emissions from the power sector. In addition to my State, the other RGGI participating states include Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Together, our nine states continue to successfully implement the nation's first fully-operational carbon market. The RGGI program caps emissions by first determining a regional budget of CO₂ allowances, and then distributing a majority of the CO₂ allowances through regional auctions so that the states may capture the allowance value for reinvestment in strategic energy programs.

Collectively, the nine RGGI participating states represent 16 percent of the U.S. economy and generate a total gross domestic product of 2.4 trillion U.S. dollars. The states work together

within the current electricity markets to create a unified system for auctioning and trading carbon allowances so that environmental goals are achieved through least-cost, market-based solutions. Although the nine states have collaborated effectively for the better part of a decade, the RGGI region remains diverse in many aspects. The RGGI states comprise three separate regional transmission organizations, different political landscapes, and dissimilar generation profiles.

For example, Maryland's in-State generation remains predominately coal [See Graph 1 in Appendix]. As a part of RGGI and coupled with other state energy initiatives, however, Maryland has diversified its fuel mix and reduced its carbon footprint. Since 2005, in-State generation from renewables, nuclear energy, and natural gas as a percentage of total generation mix has increased from 36 percent to 55 percent, while in-State generation from coal has decreased from 56 percent to 44 percent.

Over the entire RGGI region, power sector carbon pollution has decreased by over 40 percent, while the regional economy has grown by 8 percent (2005 to 2013) [See Graph 2 in Appendix]. Non-hydro renewable generation has increased by 47 percent, while regional dependency on coal and oil has decreased. The carbon intensity of the RGGI states' power sectors (in tons per MWh) has decreased at twice the rate of the rest of the country.

Market forces and complementary state policies and programs, such as RGGI, are driving these cost-effective pollution reductions while simultaneously supporting local economies. State energy efficiency, demand response, and renewable energy initiatives, as well as policies to encourage fuel-switching to less carbon-intensive fuels, all work in tandem to reduce pollution and to establish long-term solutions for a reliable energy infrastructure. Many of these complementary state strategic energy initiatives are funded using proceeds from the regional RGGI allowance auctions – creating a virtuous cycle of benefits that also serves to minimize ratepayer impact.

Through 2013, across the region the RGGI states reinvested over \$950 million of auction proceeds in energy efficiency, clean and renewable energy, and other strategic energy programs. Maryland accounted for more than \$230 million of this regional investment, with 85 percent of the State auction proceeds directed toward energy efficiency projects and direct bill assistance. The reinvestment of auction proceeds in consumer benefit programs has helped more than 215,800 low-income Maryland families pay their energy bills, supported energy efficiency upgrades at 11,800 low- to moderate-income households, and helped 5,206 families and 201 businesses in Maryland install solar, wind, and geothermal systems.

An independent analysis by the Analysis Group on the economic impacts of RGGI concluded that investments from the RGGI program's first three years alone are adding \$1.6 billion net economic value to the region, and that benefits are likely to have increased further since then [See Note 1 in Appendix]. Changes to the RGGI program in 2014 (including a 45 percent reduction to the cap) are projected to provide an additional \$8 billion in gross regional product and add more than 130,000 job-years.

These benefits – both economic and environmental – informed the perspective of the RGGI states as we voiced support for the general framework of the Clean Power Plan. Through two sets of comments in which we expressed our support, we also recommended revisions to the Plan to ensure that early action to reduce carbon emissions from the power sector is recognized, and that the state targets are verifiable, transparent, equitable, and enforceable [See Notes 2 and 3 in Appendix].

The RGGI states commend the EPA for recognizing multi-state, mass-based programs like RGGI as an acceptable means by which to demonstrate compliance with the Clean Power Plan. Regional mass-based programs are advantageous in part because they closely align with the regional nature of the electricity grid, and allow for a simple, transparent, and verifiable

tracking and compliance system. Recent analysis from PJM calculated higher compliance costs for states that “go it alone,” underscoring the cost-effectiveness of regional plans. Groups of states can implement a regional emission budget that reduces overall emissions across a region using the most cost-effective measures available to a larger geographical boundary, while allowing for potential emission increases in some specific locations where more efficient energy resources are available. This structure allows the market to determine the most cost-effective solutions, helping to maximize emission reductions at the lowest possible cost – a concept demonstrated by the RGGI states’ own experience.

Furthermore, reliance on a regional, market-based construct to accomplish environmental goals prevents the superimposition of any additional function on our markets beyond the roles already required of our existing electricity market players. Reliable dispatch of the least-cost resources remains with our grid operators, the North American Electric Reliability Corporation retains its responsibility to assure the reliability of the bulk power system, and our utilities retain responsibility for distribution-level reliability. Maryland recognizes that reliability is of utmost importance to the success of any power sector initiative, including RGGI and the Clean Power Plan. In both cases, a properly designed plan allows grid reliability and pollution reduction programs to be fully compatible.

In the RGGI states’ experience, our power sector has been able to respond effectively to environmental regulations in less time than the EPA provides the rest of the country as part of the Clean Power Plan. In fact, measures supported by RGGI investments in peak demand reduction and energy efficiency programs have advanced reliability goals in the region. Maryland has achieved a 14.6 percent reduction in peak electricity demand from a 2007 baseline, equivalent to avoiding the need for 1,743 MW from 2008-2014. In contrast, the interim compliance goal notwithstanding, states have 15 years to meet the final compliance goal. This

allows adequate time for grid reliability to be fully upheld through ordinary planning and resource development.

Independent studies of reliability under the proposed Clean Power Plan confirm the experience of the RGGI states. Researchers including the Analysis Group have noted that utilities' goals of ensuring reliability and reducing carbon pollution are fully compatible [See Note 4 in Appendix]. Others have noted that many of the grid changes encouraged by the Clean Power Plan are already underway due to existing economic forces and environmental regulations already in effect. Likewise, while the ISO/RTO comments suggest that more reliability assessments should be undertaken, the comments conclude that well-designed plans will ultimately be able to ensure reliability [See Note 5 in Appendix].

While RGGI is one path forward, it is only one of many proposed regional compliance mechanisms being discussed among industry stakeholders. Through our participation in RGGI, Maryland has accumulated invaluable lessons that may be instructive to other states as they investigate their options for compliance with the Clean Power Plan. One such lesson stems from the formation of intra- and inter-state agency relationships as part of the regional cooperative effort; relationships and resources that spill over into other initiatives such as distributed generation, electric vehicles, and compliance with other EPA regulations. The pooling of staff resources and state budgets through participation in a regional mechanism allows states to achieve a lot more, for a lot less. These administrative efficiencies translate into funding and resources for the completion of necessary regional electric sector modeling in a timely fashion, with built-in peer review. It is also the experience of the RGGI states that a regional mechanism stimulates active and productive stakeholder engagement, as many potential compliance entities span multiple jurisdictions and appreciate the desire for regional consistency. Which leads into another lesson learned: regional consistency does not require states to implement identical

programs. RGGI states do in fact deviate in program implementation and administration; for example, beyond a minimum commitment to re-invest 25% of auction proceeds in consumer benefit initiatives, RGGI states may distribute the remainder of auction proceeds as dictates by individual state needs.

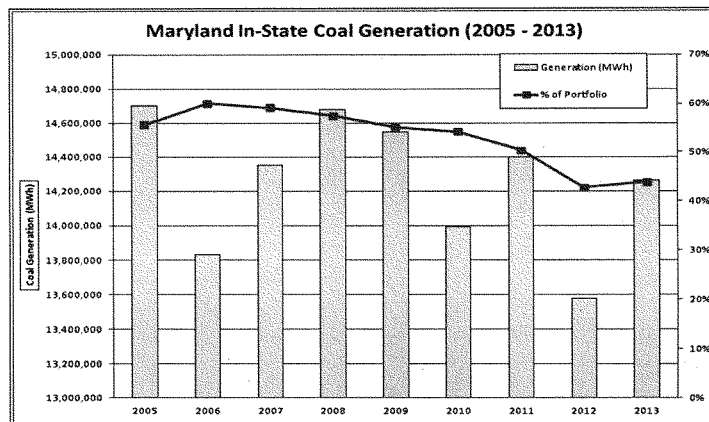
Lastly, I would like to greatly emphasize the most important lesson learned by the RGGI states to-date – a lesson that we intend to rely on as we move toward compliance with the proposed EPA rule. Participation in a regional compliance effort will likely provide your state the *most* flexibility moving forward. Initial hurdles surrounding the structure of the mechanism are not in fact insurmountable, as demonstrated by the RGGI states. Using a regional construct, the regional emission cap is the only enforceable mechanism included in a compliance plan; states retain jurisdiction over energy efficiency and renewable energy programs, and can continue to offer these initiatives as complementary measures that help mitigate the cost of compliance for their ratepayers.

Maryland looks forward to working with FERC, EPA, and our fellow states to navigate compliance options as the implementation of the Clean Power Plan moves forward. Our experience has demonstrated that flexible carbon emission reduction programs, coupled with other state policies, can work within the construct of establish markets to reduce harmful pollution while also generating economic benefits and supporting grid reliability.

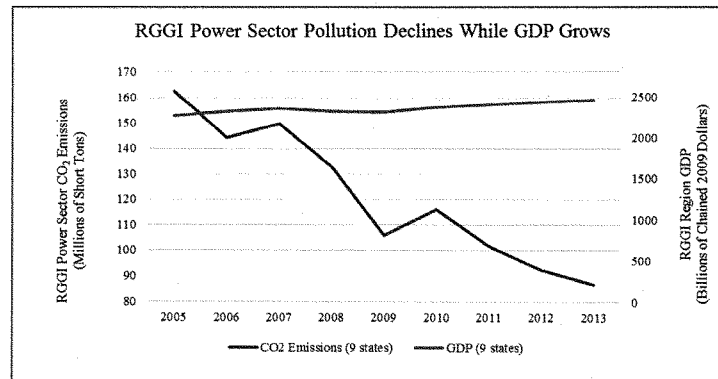
Appendix

1. *EPA's Clean Power Plan: States' Tools for Reducing Costs and Increasing Benefits to Consumers*. The Analysis Group, 2014.
2. *RGGI States' Comments on Proposed Carbon Pollution Guidelines for Existing Stationary Sources: Electricity Generating Units*. Nov. 5, 2014.
3. *RGGI States Supplemental Comments on Proposed Clean Power Plan*. Dec. 1, 2014.
4. *Electric System Reliability and EPA's Clean Power Plan: Tools and Practices*. The Analysis Group, Feb. 2015.
5. *Comments of the ISO/RTO Council on Carbon Pollution Guidelines for Existing Stationary Sources: Electricity Utility Generating Units*. Dec. 1, 2014.

Graph 1:



Graph 2:



Mr. WHITFIELD. Thank you.

Our next witness is Mr. Art Graham, who is chairman of the Florida Public Service Commission. Mr. Graham, thanks for being with us, and you are recognized for 5 minutes. And happy birthday, as I said earlier.

STATEMENT OF ART GRAHAM

Mr. GRAHAM. Thank you, Mr. Chairman. Thank you for the birthday wishes. And thank you and the subcommittee for allowing me the opportunity to come and speak today.

My testimony is my perspective as a utility regulator. I believe the EPA's Clean Power Plan, the CPP, threatens the affordability and reliability of Florida's electric power. I am going to get straight to what I feel is the most troubling aspect of the CPP. That would be both the fairness and the cost.

In Florida, we have below-average CO₂ emissions because of the following. We shifted a lot of our generations to low-emission natural gas early on. We offered incentives to harvest the available heat rate improvements over the past 30 years, and through energy efficiency programs that have already reduced consumption by 9,330 gigawatt hours. Now, all these things allowed us to realize a 25 percent decrease in CO₂ emissions from 2005 to 2012, but yet none of these things are recognized by the current plan. However, in the current plan 34 states have higher CO₂ emission rates than Florida, but only 15 states have higher reduction percentage required by the CPP.

The second concern I want to express this morning is the cost of compliance. EPA's responsibility is economic protection, which is very important. I think it is very important. But my responsibility is protecting the consumer from excessive costs and the reliability of the power grid, which I think is equally as important. The costs of implementing the CPP aren't certain at this early stage, but the utility customers will certainly pay for EPA's dramatic shift away from economic planning and least cost operation. How much is not exactly known, but the cost analysis I will talk to you about this morning from our Florida Office of Public Counsel, and you will get some idea from there.

OPC's job is to represent the utility customers' interest. They took a very conservative approach and applied EPA's own cost assumptions. The specifics are in my written testimony that I submitted earlier.

So briefly, under building block one, applying the approximate midpoint of EPA's cost range to achieve approximately 6 percent improvement, Public Counsel identified a cost of \$1.15 billion. Under building block two, Public Counsel's conservative methodology precluded costs associated with this building block, but the issues were as follows. Codifying costs for the EPA's overstatement of gas plant capacity, the cost for required new gas transportation infrastructure, i.e., pipelines, the cost for replacing generating units into retirement long before the end of their useful life, i.e., the stranded costs. I can tell you these are all big-ticketed items. Under building block three, using a U.S. Energy Information Agency's most recent costs for utility scale solar, replacing 10 percent of the conventional capacity would cost Florida \$16.8 billion. Under

building block four, for Florida EPA's 10 percent reduction equals 5,745 megawatts of avoided capacity. Our demand site program costs \$1.48 million per megawatt of avoided capacity. So EPA's assumption will cost us over \$8.5 billion.

Now, Florida's Office of Public Counsel limited itself to costs that can be cleanly calculated, applying EPA's numbers with the most basic government data. Counting only the most obvious and easily qualified costs, the expense to Florida ratepayers start at almost \$27 billion. That works out to about \$2,800 per utility customer. However, the complete cost is much, much higher.

In short, if EPA wants to reduce the carbon emission by 30 percent from the 2005 levels, well, then let us use the 2005 levels as our baseline. It makes no sense that EPA won't recognize what states have done since 2005. It is unfair to punish early efforts with bigger and more expensive requirements.

And I have some more, but I don't want to run over.

[The prepared statement of Mr. Graham follows:]

TESTIMONY OF ART GRAHAM
CHAIRMAN
FLORIDA PUBLIC SERVICE COMMISSION

Before the
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND POWER
U. S. HOUSE OF REPRESENTATIVES

March 17, 2015

The Florida Public Service Commission (Commission) is responsible for ensuring safe and reliable electric service at fair and reasonable rates for consumers in Florida. Within the realm of this responsibility, the Commission has been active in providing input during this development stage of the Clean Power Plan proposal. The Commission contends that any carbon regulation imposed on electric generators must allow flexible, cost-effective solutions and must not compromise reliability.¹ I recognize the need for and the role of environmental regulations at the state and federal level, and my comments do not take a position on environmental issues. Although the Clean Power Plan affects all aspects of the electric industry in Florida, my comments focus on two main concerns, a lack of fairness in Florida's requirements and the significant cost of compliance.

Lack of Fairness in Florida's Emission Requirements

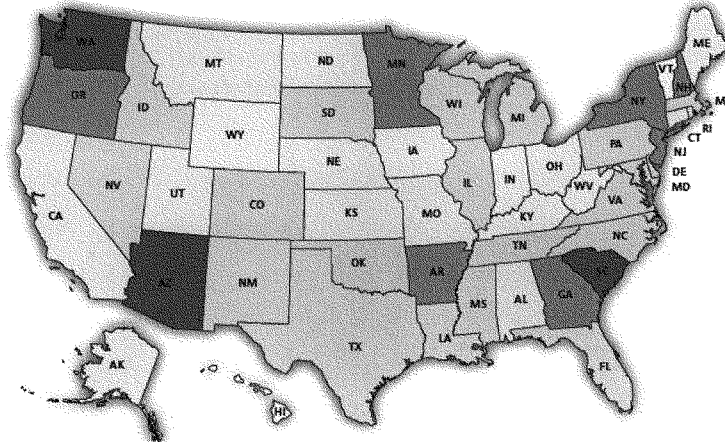
As discussed below, EPA's proposed methodology to set the Best System of Emissions Reductions (BSER) results in stringent emission performance requirements for Florida and varying interim and final goals among states. The proposal does not recognize the Florida-specific circumstances, such as prior actions and difficulties in complying with the proposal, that create large cost impacts on the ratepayers in our state.

Downward Trend in Florida's CO₂ emissions

Because of prior actions taken in Florida, the state has achieved declining CO₂ emissions. These actions include: (1) increased natural gas generation, (2) generation efficiency improvements, (3) nuclear power plant uprates, and (4) utility-sponsored conservation programs. As shown on

¹ The Florida Public Service Commission's comments to the EPA :
http://www.floridapsc.com/dockets/federal/PDFs/Comments_EPA_12_1_2014.pdf

EPA's proposed carbon emissions rates for existing power plants (lbs/MWh)



Percent change (2012-2030)

11% - 20% 21% - 30% 31% - 40% 41% - 50% 51% - 72%

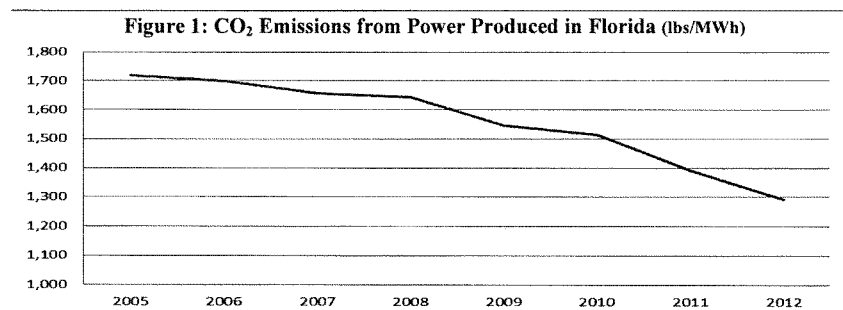
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State	Historical emissions rate (2012)	Avg. Interim emissions rate goal (2020 - 2029)	Final emissions rate goal (2030+)	Required change (2012-2030)
Alabama	1,444	1,147	1,059	27%
Alaska	1,351	1,097	1,003	26%
Arizona	1,453	735	702	52%
Arkansas	1,640	968	910	45%
California	698	556	537	23%
Colorado	1,714	1,159	1,108	35%
Connecticut	765	597	540	29%
Delaware	1,234	913	841	32%
Florida	1,200	794	740	38%
Georgia	1,500	891	834	44%
Hawaii	1,540	1,378	1,306	15%
Idaho	339	244	228	33%
Illinois	1,895	1,366	1,271	33%
Indiana	1,923	1,607	1,531	20%
Iowa	1,552	1,341	1,301	16%
Kansas	1,940	1,578	1,499	23%
Kentucky	2,158	1,844	1,763	18%
Louisiana	1,466	948	883	40%
Maine	437	393	378	14%
Maryland	1,870	1,347	1,187	37%
Massachusetts	925	655	576	38%
Michigan	1,696	1,227	1,161	32%
Minnesota	1,470	911	873	41%
Mississippi	1,130	732	692	39%
Missouri	1,963	1,621	1,544	21%

State	Historical emissions rate (2012)	Avg. Interim emissions rate goal (2020 - 2029)	Final emissions rate goal (2030+)	Required change (2012-2030)
Montana	2,245	1,882	1,771	21%
Nebraska	2,009	1,596	1,479	26%
Nevada	988	697	647	34%
New Hampshire	905	546	486	46%
New Jersey	932	647	531	43%
New Mexico	1,586	1,107	1,048	34%
New York	983	635	549	45%
North Carolina	1,646	1,077	992	40%
North Dakota	1,994	1,817	1,783	11%
Ohio	1,850	1,452	1,338	28%
Oklahoma	1,397	931	895	36%
Oregon	717	407	372	48%
Pennsylvania	1,540	1,179	1,052	32%
Rhode Island	907	822	782	14%
South Carolina	1,597	840	772	52%
South Dakota	1,135	800	741	35%
Tennessee	1,903	1,254	1,163	39%
Texas	1,298	853	791	39%
Utah	1,813	1,378	1,322	27%
Virginia	1,297	884	810	38%
Washington	763	264	215	72%
West Virginia	2,019	1,748	1,620	20%
Wisconsin	1,827	1,281	1,203	34%
Wyoming	2,115	1,808	1,714	19%

Sources: U.S. EPA Clean Power Plan, CleanPowerPlanmaps.epa.gov
Map credit: Whit Varner

Figure 1, data from the Florida Department of Environmental Protection demonstrates that Florida's average CO₂ emissions profile, for power produced in Florida, decreased from 1,718 lbs/MWh in 2005 to 1,291 lbs/MWh (before Clean Power Plan adjustments) in 2012, a 25 percent reduction in CO₂ emission rates. This downward trend was achieved through the application of long-term planning practices that identify the most cost-effective resources, while maintaining reasonable rates for Florida's consumers.



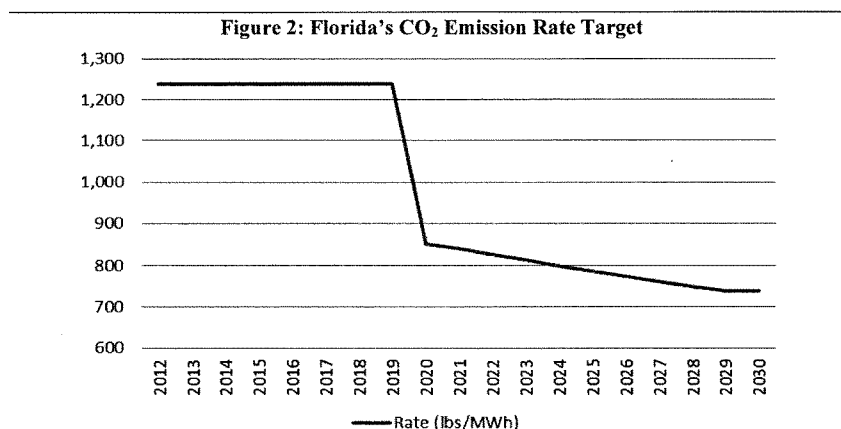
Source: Florida Department of Environmental Protection

(Clean Power Plan adjustments not applied)

Level of Stringency in Florida's Requirements

EPA's proposed methodology, which imposes national assumptions on individual states, results in a 2020 interim target of 794 lbs/Megawatt-hour (MWh) for Florida, with a final target of 740 lbs/MWh by 2030. The final target represents an additional 38 percent reduction in Florida's CO₂ emissions profile relative to EPA's 2012 baseline year. It is important to note that these required reductions are in addition to the 25 percent reductions Florida achieved over the seven-years prior to 2012. To comply, Florida will have to more than double its past efforts within less than five years. I believe this requirement is unreasonable and unfairly penalizes Florida for

having taken actions that reduced CO₂ emissions prior to EPA's 2012 baseline year. Further, the proposed interim requirement for Florida is only marginally different from the final requirement, and requires a substantial proportion of the 2030 CO₂ emissions reductions to occur beginning in 2020. Figure 2 shows the dramatic expectations EPA proposed for Florida.



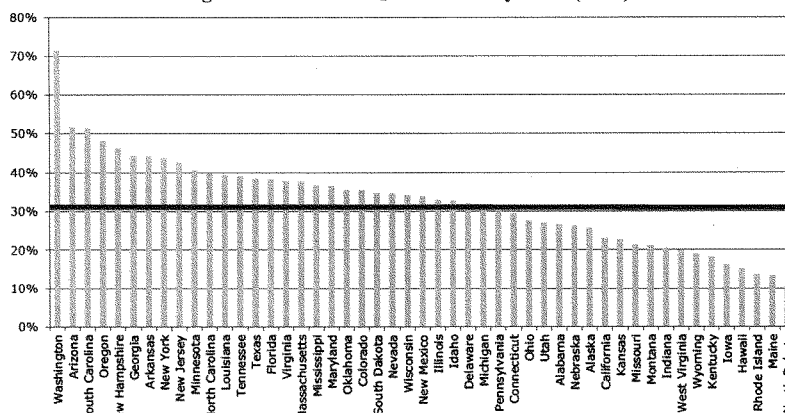
Source: EPA Goal Calculation Technical Support Document

Additionally, Florida's final emissions target is lower than what is achievable by any fossil-fueled baseload plant. For example, if a utility wanted to add a new natural gas facility after 2020, there will be a requirement to offset excess emissions with non-emitting resources.² However, in Florida, apart from nuclear, there are no substantive and proven non-emitting baseload options. This means Florida's options to address aging baseload resources will be constrained and consequently costly.

² EPA's proposed CO₂ emissions standards for new natural gas combined cycles is 1,000 lbs/MWh, or 260 lbs/MWh higher than Florida's final target.

Florida's Targets Compared to Other States

EPA's issuance of statewide requirements using national assumptions results in different interim and final goals among states. Figure 3 shows the wide range of EPA's proposed targets across the states. These varying targets require some states to shoulder more of the reduction burden than other states. Florida's emissions reductions goal is 38 percent, while 19 states have an emissions reductions goal of 30 percent or less. Additionally, some states have no emissions reduction requirements. As a result, the targets set for Florida can place our state at a competitive disadvantage to other states due to the impact of compliance costs on Florida's electric rates. It is particularly discouraging that states like Florida that have already progressed toward a lower emitting fuel source, natural gas, have a more stringent target than other states that can continue to rely on coal as a primary generating fuel. A long-term plan that gradually results in switching from coal to other generation resources can be one of the lower cost options for reducing carbon emissions. Because Florida has already shifted to 65 percent natural gas generation options, to further reduce carbon emissions will be more difficult and costly for Florida than for states with less stringent requirements.

Figure 3: Percent CO₂ Reduction by State (2030)

Source: Sidley Austin LLP, *EPA's Existing Source Performance Standard for Greenhouse Gases June 9, 2014*

Geographic Challenges to Implementation

Florida's peninsular shape and distribution of load centers limits options to comply with the Clean Power Plan. Florida's transmission capability to import energy into our state from other states is limited to approximately 3,800 megawatts of transport capability into the peninsula. Florida's limited ability to import energy reduces its opportunity to engage in multi-state compliance options, and the associated cost reductions, compared to other states with more centralized geographies and neighboring states that may have diverse generation resources.

Further, Florida's coal-fired facilities and natural gas combined cycle (NGCC) facilities are not typically co-located nor generally located within the same utility system. This means the interconnecting transmission segments were not developed with the expectation that all NGCC facilities would permanently displace all or most of the baseload coal-fired facilities as

envisioned by the Clean Power Plan. Whether Florida can achieve such a transition by 2020 without compromising reliability is unknown and without precedent.

Heat Rate Improvement Requirement

EPA's Building Block 1 unfairly assumes that heat rate improvements are available at all coal-fired plants without consideration of any prior improvements. The national 6 percent heat rate improvement assumption does not account for Florida's history of heat rate improvements and promotes the unrealistic assumption that material further improvements remain unexplored.

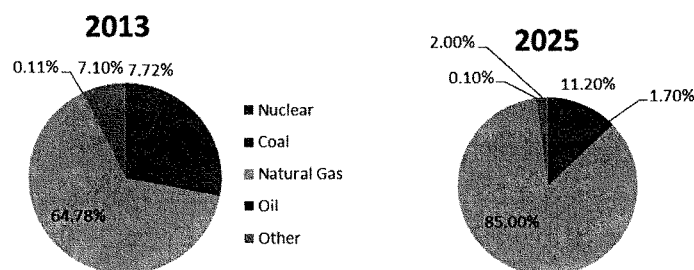
Florida has a long history of providing its investor-owned utilities a financial incentive to improve the operating efficiency of coal-fired power plants. The Commission's Generation Performance Incentive Factor is designed to encourage the efficient operation of electric baseload generating units. As a part of an annual proceeding, our Commission sets targets for electric generating utilities that include heat rate improvements. The Commission has the authority to approve financial rewards or impose penalties related to heat rate efficiency. Because this policy specifically encourages utilities to engage in supply-side energy efficiency improvements, many of our utilities have already invested in heat rate improvements. EPA's national heat rate improvement assumption for coal units fails to recognize Florida's efficiency improvements to its coal fleet due to this policy.

Redispatch of Natural Gas facilities

EPA's Building Block 2 assumes that all states will be able to average a 70 percent dispatch of natural gas combined cycles without consideration of site-specific circumstances that may hinder reaching this sustained level of utilization.

Florida's reliance on natural gas as a generation fuel has gradually increased. Currently, more than 65 percent of the electric power in Florida is generated from natural gas, while approximately 21 percent is generated from coal and oil. With the implementation of the Clean Power Plan, Florida's dependence on natural gas is projected to rapidly increase to 85 percent of statewide generation by 2025, as displayed in Figure 4. As Florida has no native natural gas production and limited storage options, this high dependency on natural gas generation unfairly exposes the state's ratepayers to the risks associated with excessive reliance on a single fuel source. History has demonstrated it is important for Florida to maintain a diversified generation fuel source mix. A diversified fuel supply enhances system reliability and significantly mitigates the effects of volatile fuel price fluctuations, extreme weather events such as hurricanes, and unplanned plant outages. The EPA proposal would require Florida to rapidly transition to even higher natural gas dependency which could preclude the development and implementation of adequate risk mitigation strategies, if any exist.

Figure 4: Historic and EPA Projected Florida Energy Generation by Fuel Type



Source: 2014 Florida Reliability Coordinating Council Load & Resource Plans and EPA Parsed File Option 1 State, 2025

Moreover, to reach the required high level of natural gas combined cycle plant utilization, EPA's modeling of the proposal shows a 90 percent reduction in coal-fired generation for Florida. Conversely, a review of the modeling results of some other states reveals little or no retirement of coal-fired units to achieve the higher natural gas capacity. This inconsistent treatment by EPA will result in a disproportionate economic impact on Florida.

Energy Efficiency Requirements

There are factors that affect the success of Florida's utility-sponsored energy efficiency programs that were not part of EPA's national assumption of possible savings in Building Block 4. For example, Florida's historical achievements in energy efficiency and the consequences of progressively more stringent appliance efficiency standards and state building codes are factors that limit expansion of cost-effective energy efficiency efforts. Over the last 33 years, the energy efficiency activities subject to the Florida Public Service Commission's oversight have reduced winter peak demand by an estimated 6,506 megawatts (MW) and summer peak demand by an

estimated 6,871 MW. The demand savings from these programs have resulted in the deferral or avoidance of a substantial fleet of power plants. These programs have also reduced total electric energy consumption by an estimated 9,330 gigawatt-hours. As a result of these prior actions Florida has a reduced potential for additional cost-effective energy savings.

Cost of Implementation

At this time, there is no certainty regarding the compliance cost of the Clean Power Plan. The Clean Power Plan is being revised and Florida has not adopted a compliance plan. However, a review of three different assessments of the impacts of the Clean Power Plan gives a picture of what is potentially in store. As explained below, each differs from the other with respect to the author's interests and analytical approach. Collectively these support a conclusion that Florida will incur significant costs in response to the Clean Power Plan.

NERA Economics Consulting (NERA)

NERA, in a study titled "Potential Energy Impacts of the EPA Proposed Clean Power Plan," presented estimates of compliance costs under various scenarios.³ NERA evaluated potential energy market impacts due to the Clean Power Plan over the 2017-2031 period. The analysis modeled state compliance with the Clean Power Plan under a scenario where each state could use any of the four building blocks, and another scenario where states could not rely on Building Blocks 3 and 4 addressing renewable generation and energy efficiency programs. Based on its assumptions for these scenarios, NERA estimated that Florida's average electric bill may increase between 13 and 17 percent by 2030. The NERA study also noted concerns that costs were likely understated, particularly with respect to energy efficiency.

³ <http://www.nera.com/publications/archive/2014/potential-impacts-of-the-epa-clean-power-plan.html>

Florida Electric Power Coordinating Group Environmental Committee (FCG)

The FCG represents investor-owned electric utilities, rural electric cooperatives, and municipal electric utilities on environmental issues affecting the electric utility industry. In 2012, five investor-owned electric companies, 35 municipally owned electric utilities, and 18 rural electric cooperatives collectively served Florida's 9.5 million customers.^{4,5} The largest utility had over 4 million customers and the smallest had only 1,048 customers.^{8,6} Consequently, the FCG's comments on the Clean Power Plan reflect a broad spectrum of circumstances and concerns in Florida's electric industry.⁷

The FCG noted that existing electric system investments are not sufficient to comply with the Clean Power Plan regardless of how those resources are used. The equivalent of 5,000 to 20,000 MW of new zero-emitting resources will be required, depending on actual resources chosen. For example, a primarily solar compliance plan would require approximately 20,000 MWs.

The FCG asserted that the Clean Power Plan did not consider stranded costs that are caused by a sudden limitation on otherwise usable coal-based generation. These prior investments have ongoing debt requirements and contract commitments even though, under the Clean Power Plan, these assets will not likely be used to generate revenues. Thus, the Clean Power Plan may likely require some utility customers to effectively pay twice; once for the assets in use and again for assets that cannot be used.

⁴ <http://www.floridapsc.com/publications/pdf/general/factsandfigures2014.pdf>

⁵ http://www.floridapsc.com/utilities/electricgas/docs/FRCC_2014_Load_Resource_Plan.pdf

⁶ http://www.publicpower.com/stats/2012_florida_publicpower_utility_statistical_information.xls

⁷ <http://www.floridapsc.com/utilities/electricgas/EPACarbonrules/index.aspx>

While some Florida utilities may have less of an emission performance burden than others, it is also important to recognize that the cost impacts will not likely be uniformly distributed because smaller utilities tend to have limited options. The FCG concluded that the average utility rate increase may approach 25 to 50 percent depending on size and generating mix reflected in current rates.

The FCG assessment provides a local view without modeling what may occur in national wholesale markets. The FCG's approach is reasonable because Florida, especially the peninsular region that has limited external transmission interconnects, enjoys a long history of self-reliance that has been shown to perform well. Consequently, representation of potential increases of 25 to 50 percent in some retail electric rates is a credible estimate of the level of Florida's Clean Power Plan costs.

Florida Office of Public Counsel (OPC)

The OPC advocates on behalf of Florida's retail customers who are served by investor-owned utilities. Unlike other efforts, OPC calculated indicative Clean Power Plan compliance costs without the use of forecasting, market assumptions, and other econometric techniques.⁸ Instead, OPC's approach conservatively calculated costs based only on EPA's assumptions, Florida 2012 statistics, and other public data to develop a cost scalar for Building Blocks 1, 3, and 4 of \$1.15 billion, \$16.8 billion and 8.6 billion, respectively.⁹ The analysis did not attempt to account for major costs that could not be readily quantified with EPA's assumptions and published data.

⁸http://warrington.ufl.edu/centers/purc/puredocs/PAPERS/TRAINING/events/Annual_Conf/2015_Annual_Conf/Where%20is%20the%20EPA%20Taking%20Us%20John%20Truitt.pdf

⁹ The calculations and assumptions are shown in Attachment A.

In its comments to EPA, OPC asserted that the estimated capital expenditures totaling almost \$27 billion are unreasonable. OPC's assessment serves to highlight the potential magnitude of costs to Florida, net of growth, escalation, and other possible future effects. The magnitude of OPC's estimate lends support that EPA should re-examine the electric industry and its costs.

Building Block 1 - \$1.15 billion

Public Counsel's analysis says the EPA estimates the cost of implementing heat rate improvements at "relatively modest capital costs" of \$100 per kW. Using Florida's 2012 coal capacity of 11,491 MW, Florida consumers would pay \$1.15 billion for these heat rate improvements.

\$100 per kW assumption: EPA asserted a range of 4 to 12 percent heat rate improvement would cost between \$40 and \$150 per kilowatt (Federal Register/ Vol. 79, No. 117 / Wednesday, June 18, 2014 / Proposed Rules 34861, paragraph c.)

The EPA's most detailed estimates of the average costs required to achieve the full range of heat rate improvements come from the 2009 Sargent & Lundy Study discussed above. Based on the study, the EPA estimated that for a range of heat rate improvements from 415 to 1205 Btus per kWh, corresponding to percentage heat rate improvements of 4 to 12 percent for a typical coal-fired EGU, the required capital costs would range from \$40 to \$150 per kW. To correspond to the average heat rate improvement of six percent that we have estimated to be achievable through the combination of best practices and equipment upgrades, we have estimated an average cost of \$100 per kW, slightly above the midpoint of the Sargent & Lundy Study's range.

11,491 MW assumption: Florida Public Service Commission, Facts and Figures of the Florida Utility Industry, (Mar. 2014), page 2 graphic shows existing coal summer capacity as 12,026 MW and a proposed level of 11,093 MW. The graphic also provides detail on other generating capacity, allowing the percentage of coal (20.7%) calculation to be made. On a generation basis, coal-fired resources provided 20.3% of the total 2012 generation.

Florida Public Service Commission, Facts and Figures of the Florida Utility Industry, (Mar. 2014), page 1 states Florida's combined utility and non-utility summer generating capability as of January 1, 2013 was 57,454 MW.

$$20\% \times 57,454 \text{ MW} = 11,491 \text{ MW}$$

Final calculation:

$$\text{\$100/kW} \times 1,000 \text{ kW/MW} \times 11,491 \text{ MW} = \text{\$1,149,100,000} \approx \text{\$1.15 billion}$$

Building Block 2

Office of Public Counsel did not attempt to quantify the costs associated with Building Block 2.

Building Block 3 - \$16.8 billion

Achieving 10% percent of Florida's 2012 generating capacity through renewables would require 5,745 MW of renewable capacity. In 2012, Florida had 1,400 MW of renewable capacity, so the state would need to add 4,345 MW of renewable capacity to reach the final goal.

Using the U.S. Energy Information Agency's most recent installed costs for utility scale photovoltaic of \$3,873 per kW, the installed cost of 4,345 MW is \$16.8 billion.

\$3,873/KW assumption: The EIA document states the amount is in 2012 dollars and represents only the overnight capital costs for utility scale PV projects. See table 1 on page 6 at the following link. http://www.eia.gov/forecasts/capitalcost/pdf/updated_capcost.pdf.

4,345 MW assumption: Florida Public Service Commission, Facts and Figures of the Florida Utility Industry, (Mar. 2014), page 1 states Florida's combined utility and non-utility summer generating capability as of January 1, 2013 was 57,454 MW.

Florida Public Service Commission, Facts and Figures of the Florida Utility Industry, (Mar. 2014), page 2 graphic shows existing renewables totaled 1,400 MW and proposed were 2,436 MW.

Also, Review of the 2012 Ten-Year Site Plans for Florida's Electric Utilities, states 1,400 MW of existing renewable capacity on page 28.

$$57,454 \text{ MW} \times 10\% = 5,745 \text{ MW}$$

$$5,745 \text{ MW} - 1,400 \text{ MW} = 4,345 \text{ MW}$$

Final calculation:

$$\text{\$3,873/KW} \times 1,000 \text{ kW/MW} \times 4,345 \text{ MW} = \text{\$16,828,185,000} \approx \text{\$16.8 billion}$$

Building Block 4 - \$8.6 billion

As under Building Block 3, 10% of Florida's 2012 generating capacity is 5,745 MW. In that benchmark year, the state's DSM programs achieved a reduction of 259.7 MW at a cost of \$388 million. At that rate of \$1.49 million per MW of avoided capacity, the 5,745 MW requirement would cost \$8.6 billion

\$1.49 million/MW assumption: The reference document is Florida Public Service Commission, Annual Report on Activities Pursuant to the Florida Energy and Conservation Act, (February 2014). On page 11, Table 4 shows that FPL, DEF, TECO, FPUC, and Gulf together incurred \$387,932,327 for their respective DSM activities. On page 19, table 9, the summer MW reductions achieved during 2012 total 259.7 MWs by the five IOUs, JEA and OUC.

$$\$387,932,327 / 259.7 \text{ MW} = \$1,493,771$$

5,745 MW assumption: Florida Public Service Commission, Facts and Figures of the Florida Utility Industry, (Mar. 2014), page 1 states Florida's combined utility and non-utility summer generating capability as of January 1, 2013 was 57,454 MW.

$$57,454 \text{ MW} \times 10\% = 5,745 \text{ MW}$$

Final calculation:

$$\$388 \text{ million} / 259.7 \text{ MW} \times 5,745 \text{ MW} = \$8,583,211,398 \approx \$8.6 \text{ billion}$$

Mr. WHITFIELD. OK, Mr. Graham, thank you very much, and we will have an opportunity to ask questions as well, and then we have your full statement for the record.

At this time, I would like to introduce Donald van der Vaart, who is the Secretary for North Carolina Department of Environment and Natural Resources. Thanks very much for being with us, and you are recognized for 5 minutes.

STATEMENT OF DONALD VAN DER VAART

Mr. VAN DER VAART. Thank you. Chairman Whitfield, Ranking Member Rush, and members of the subcommittee, thank you for inviting me to testify this afternoon.

I have the privilege of serving Governor McCrory as Secretary of the Department of Environment and Natural Resources, and I am grateful for the opportunity to share my views on this very important topic. I would also like to recognize Representatives Hudson and Ellmers, two distinguished North Carolina members who sit on this committee.

The Clean Air Act specifically provides that states, not the EPA, have the primary responsibility for implementing programs that protect the resources of this Nation. It is an indisputable fact that states like North Carolina have been very successful over the past 30 years implementing programs that protect public health and welfare, while providing for economic development.

Before I comment on the specific issues of state resources, I would like to note the issues that are omitted from my comments. First, my comments will not address the scientific uncertainty of the impact of human activity and greenhouse gases have on climate. My comments do not discuss the accuracy, or the lack thereof, of the IPCC models relied upon by the EPA to develop this rule, or the divergence between the models' predictions and actual temperatures over the past 15 years. Although these issues are critical in any decision to regulate greenhouse gases, my comments are limited to separate but equally important aspects of any final 111(d) rulemaking process: that is, state resources, state and utility planning efforts, and the legal frailty of the proposed rule.

I will address the state resources and advocate for what North Carolina calls the legal trigger approach to Section 111(d) implementation. Given the certain litigation that will ensue if the proposed rule under 111(d) is promulgated, states such as North Carolina are at risk of investing unnecessary time and resources, developing and enacting state 111(d) plans prior to the resolution of litigation. North Carolina recommends that the EPA amend the rule's submittal deadlines to require states to submit a 111(d) plan only after the conclusion of the judicial review process. Traditionally, when the EPA promulgates a new rule that sets forth requirements designed to address some aspect of the Clean Air Act, each state must take action, usually in the form of legislation and rule-making, to avoid sanctions directly or avoid sanctions on its sources. The state then submits a demonstration to the EPA for approval, which can take anywhere from a few months to many years, during which time the states implement their rules. If the rule is struck down, however, the state is forced to uproot its earlier work and begin a new planning process; legislation, rule-

making, implementation and enforcement, and the process must often be amended again when EPA revises its illegal rule in an attempt to satisfy the courts.

This is not just an academic concern. There are several recent cases where this study in futility has occurred. The EPA's attempts to address economic inequity in regional energy markets through interstate pollution rules, such as the NO_x SIP Call, the Clean Air Interstate Rule, and the Cross-State Air Pollution Control Rule, all prime examples. There is universal agreement that the 111(d) rule will fundamentally restructure how energy is generated and consumed in America. I would argue that EPA's Section 111(d) rule is to energy what the Affordable Care Act is to healthcare. This fundamental change to America's electricity model will come at the hands of a rule that few consider legally firm. The EPA acknowledges in the rule that it is structured to survive even if portions of the rule are struck down. In my more than 20 years of implementing air quality rules, I am not aware of any rule where the EPA has made an a priori acknowledgement of legal infirmity.

Despite the rule's uncertain future, state plans would need to move forward to allow, for example, switching from a cost-based energy dispatch model to a carbon dioxide dispatch model. Under the EPA's current proposal, legislative changes, utility resource planning, and regulatory execution must proceed while 111(d) is under judicial review. EPA's acknowledgement of the legal frailty of their creative interpretation of the Clean Air Act not only argues for the legal trigger, but it also calls Chevron deference into question. In this rule, like many other EPA rulemakings, the EPA characterizes statutory language as ambiguous to invoke Chevron deference. Unfortunately, the EPA's legal track record is so poor that one can only wonder if Chevron deference should be withdrawn because the agency has abused its public trust.

Simply stated, if the EPA wants to upend the world's greatest power system by forcing a round peg into the square hole that is Section 111(d), it should have the prudence to allow the final rule to be reviewed by the courts before requiring states to undertake such a profound effort.

Thank you for the opportunity to have testified.

[The prepared statement of Mr. van der Vaart follows:]

**Testimony before the
House Committee on Energy and
Commerce
Subcommittee on Energy and Power
“EPA’s Proposed 111(d) Rule for Existing
Power Plants: Legal and Cost Issues”**

March 17, 2015

Donald R. van der Vaart, Ph.D, P.E., J.D.
North Carolina Department of Environment
and Natural Resources

**Statement of
Donald R. van der Vaart, Ph.D., P.E., J.D.
North Carolina Department of Environment and Natural Resources
March 17, 2015**

Chairman Whitfield, Ranking Member Rush and members of the subcommittee, thank you for inviting me to testify this morning. As Secretary of the North Carolina Department of Environment and Natural Resources, I'm grateful for the opportunity to testify today and share my views on this important topic.

The Clean Air Act (Act) specifically provides that states – not the Environmental Protection Agency (EPA) – “have the primary responsibility” for implementing programs that protect the air resources of this nation. It is an indisputable fact that states, like North Carolina, have been very successful over the past 30 years implementing programs that protect public health and welfare while providing for robust economic development.

Before I comment on the specific issue of state resources, I would like to note issues that are intentionally omitted from my comments. First, my comments will not address the scientific uncertainty of the impact anthropogenic greenhouse gas emissions (GHGs) have on climate. My comments do not discuss the accuracy, or lack thereof, of the Intergovernmental Panel on Climate Change (IPCC) models relied upon by the EPA to develop this rule, or the divergence between the models' predictions and actual temperatures over the past 15 years. Although these issues are critical to any decision in regulating greenhouse gases, my comments are limited to separate, but equally important, aspects of any final 111(d) rulemaking: state resources, state and utility planning efforts, and the legal frailty of the rule.

First I will address state resources and advocate for what North Carolina has called the “Legal Trigger” approach to §111(d) implementation.

Given the almost certain litigation that will ensue if the proposed rule under §111(d) is promulgated, states such as North Carolina are at risk of investing unnecessary time and resources if they move forward with developing and enacting state §111(d) plans prior to the resolution of litigation. North Carolina recommends that the EPA amend submittal deadlines contained in the Subpart B regulations – rules that implement §111(d). More specifically, the EPA should require states to submit a §111(d) plan only after the conclusion of due process afforded by the judicial review process. Employing this legal trigger approach would ensure that states, the EPA and regulated sources (which need considerable time to enact such sweeping changes to electricity generation) do not expend their limited resources in an attempt to satisfy yet another EPA rule that ultimately is vacated or remanded.

The federalist structure of the CAA establishes a procedure whereby the EPA promulgates a new rule that sets forth requirements designed to address some aspect of the CAA. Once the rule is finalized, each state must take action – usually in the form of state legislation or rulemaking – to avoid sanctions directly or to avoid sanctions on its sources. The state then submits that set of rules to the EPA for approval. The time required to complete the EPA review process varies dramatically; it can take a few months to many years during which time the states implement and enforce their state rule.

These obstacles are compounded when the federal rule that required the state to act is struck down by the court. This forces the state to both repeal its earlier work and begin a new planning process – legislation, rulemaking, implementation and enforcement – and the process must often be amended again when the EPA revises its illegal rule in an attempt to satisfy the courts.

This is not just an academic concern – there are several recent cases where this study in futility has occurred. The EPA’s attempts to address economic inequity in regional energy markets through interstate pollution rules such as the 1997 Interstate NOx Rule, the Clean Air Interstate Rule (CAIR), and the Cross-State Air Pollution Control Rule (CSAPR) are prime examples of the negative impacts on states when the EPA accelerates implementation ahead of judicial review. States, in an attempt to satisfy these interstate pollution rules, spent substantial resources requiring emission reductions only to find out that the rules, or portions of the rules, were illegal.

The potential for the 111(d) rule to have this whipsaw effect on states is particularly dangerous because of the scope of the proposed 111(d) rule. There is one tenet on which nearly all stakeholders agree – the 111(d) rule will fundamentally restructure both how energy is generated and consumed in America. I would argue that the EPA’s section 111(d) is to energy what the Affordable Care Act is to healthcare. Like the ACA, the proposed 111(d) rule is an attempt to impose a one size fits all solution that will transform the nation’s energy system.

This fundamental change to America’s electricity model will come at the hands of a rule that few consider legally firm. Even the EPA has acknowledged the rule is not likely to survive a judicial challenge intact. The rule actually contains the following disclaimer: “[the] building blocks [are]

... severable, such that in the event a court were to invalidate our finding with respect to any particular building block” the remaining building blocks would survive. See 79 Fed. Reg. at 34892. In my more than 20 years of implementing air quality rules, I am not aware of any rule where the EPA has made an *a priori* acknowledgment of legal infirmity.

But in the face of this frailty, state plans, which must be drafted and put in place prior to judicial review, will require major legislative changes to allow, for example, switching from a cost-based energy dispatch model (i.e.: the priority for dispatch is based on lowest cost generation) to a carbon dioxide dispatch model (i.e.: the priority for dispatch is based on generation with the lowest carbon dioxide emissions). If judicial review results in invalidating portions of the 111(d) rule, decisions made by utilities to shutdown coal-fired power plants prior to cost recovery and installing new gas-fired generation may become irretrievable stranded costs that will unnecessarily increase utility rates. Under the EPA’s current proposal, legislative changes, utility planning and regulatory execution will proceed while the 111(d) rule is under judicial review.

The EPA’s acknowledgment of the legal frailty of their creative interpretation of the CAA not only argues for the legal trigger, but also calls into question the more general issue of Chevron deference. In this rule, like many other EPA rulemakings, the EPA characterizes statutory language as “ambiguous” in order to direct courts into granting to grant the agency Chevron deference. The touchstone of Chevron deference – wherein the court defers to an agency’s interpretation of an ambiguous statute – is the expertise the agency gained when it was entrusted with implementation of a certain statute (here the CAA). Unfortunately, the EPA’s recent legal

track record is so poor that one can only wonder if the agency has abused its public trust and therefore Chevron deference should be withdrawn.

Once again, this is not a debate about the science of climate change, nor is it a question of whether the EPA should or should not regulate GHGs. Simply stated, if the EPA wants to transform America's power system by forcing a round peg into the square hole that is §111(d), it should have the prudence to allow the final rule to be reviewed by the courts before requiring states to undertake such a Herculean effort.

Thank you for the opportunity to testify. I would be happy to answer any questions you may have.

Mr. WHITFIELD. Thank you, Mr. van der Vaart. And thank all of you for taking time to give us your views on this important issue.

I will recognize myself for 5 minutes for questions.

In my opening statement, I described this proposed regulation as being characterized as extreme, a power grab, radical, unprecedented, and even unlawful. I think you can come to the logical conclusion that this is being implemented to implement the President's international agreements.

And I would ask each of you, the EPA has given the states 13 months to come up with a state implementation plan if this regulation is adopted. Is that an unusually short period of time from your personal experience with EPA? Mr. Butler?

Mr. BUTLER. Mr. Chairman, it is a very short time frame, frankly, one which we don't believe we could ever meet.

Mr. WHITFIELD. OK.

Mr. BUTLER. And I know some states are different.

Mr. WHITFIELD. OK, so it is very short. You don't think you can meet it.

What about you, Ms. Speakes-Backman?

Ms. SPEAKES-BACKMAN. Well, thank you for the question. I would say that for my state and for the other eight participating RGGI states, since EPA has explicitly allowed our construct to exist, we already are practicing what they are asking for.

Mr. WHITFIELD. So you are saying you could meet the—

Ms. SPEAKES-BACKMAN. Absolutely.

Mr. WHITFIELD [continuing]. Proposed regulation.

Mr. Graham?

Mr. GRAHAM. I agree it is short, and I don't think we can do it either. We would have to have several special sessions.

Mr. WHITFIELD. OK. What about you, Mr. van der Vaart?

Mr. VAN DER VAART. The plan that we anticipate submitting we could meet. It is not the plan the EPA is seeking.

Mr. WHITFIELD. OK. Now, this has been described as a real takeover of the electric system in America—generating system. Why would EPA, from your personal view, would they want a 13-month time period to allow states to implement something this complicated? What would be the reason for that? Mr. Butler, do you have any idea?

Mr. BUTLER. Mr. Chairman, I think it is—as I had pointed out in mine, and you had in your testimony, I think the President has a goal that he is trying to meet, and is asking the states to help him meet that goal, but a very short time frame.

Mr. WHITFIELD. OK. Why do you think, Ms. Speakes-Backman?

Ms. SPEAKES-BACKMAN. I can't say exactly why because I don't agree with the premise, necessarily, that it is a takeover, sir.

Mr. WHITFIELD. OK, what about you, Mr. Graham, do you have any idea why?

Mr. GRAHAM. Mr. Chairman, I would agree with you and Mr. Butler on that.

Mr. WHITFIELD. OK. Mr. van der Vaart?

Mr. VAN DER VAART. I believe that this fictitious sense of urgency is not about emission reductions. We are meeting emission reductions, thanks in large part to the free market and the low cost of natural gas.

Mr. WHITFIELD. Yes.

Mr. VAN DER VAART. I believe the urgency has to do with the fact that they sense that the veil of legal authority has been stripped from this rule, and it will soon meet its demise.

Mr. WHITFIELD. Yes.

Mr. VAN DER VAART. They want to force——

Mr. WHITFIELD. Yes.

Mr. VAN DER VAART [continuing]. Utility companies to begin their planning process——

Mr. WHITFIELD. Yes.

Mr. VAN DER VAART [continuing]. Which is a lot longer than 13 months, so that they can get this ball rolling.

Mr. WHITFIELD. And, you know, in our first panel, you listened to the constitutional arguments and so forth. How many of you actually believe that the average citizen out there has any basic understanding of the impact of this regulation and what it would be? Do you think the average citizen even has any insight into this, Mr. Butler?

Mr. BUTLER. Mr. Chairman, we did an extensive outreach and—— as we prepared our comments, and we took a lot of public comment on this, but irrespective of that, I think in general, the public does not understand any of the technical details of any of the legal construct here——

Mr. WHITFIELD. Right.

Mr. BUTLER [continuing]. That is under debate, nor, frankly, what the potential cost might be because we have not, frankly, been able to understand the plan well enough or know——

Mr. WHITFIELD. You probably don't understand what the cost implications are.

Mr. BUTLER. Right.

Mr. WHITFIELD. Do you think the average citizen understands the potential impact of this?

Ms. SPEAKES-BACKMAN. I believe that public sentiment is increasingly aware of climate change and the issues——

Mr. WHITFIELD. I am not talking about climate change, I am asking you——

Ms. SPEAKES-BACKMAN. And——

Mr. WHITFIELD [continuing]. Do they understand the impact, in your opinion, of the consequences of this?

Ms. SPEAKES-BACKMAN. The impact in our RGGI states is less than 1 percent for the overall——

Mr. WHITFIELD. So you think they do understand——

Ms. SPEAKES-BACKMAN [continuing]. So that——

Mr. WHITFIELD. OK, Mr.——

Ms. SPEAKES-BACKMAN [continuing]. Impact is not necessary——

Mr. WHITFIELD. Mr. Graham, what about you, do you think they understand?

Mr. GRAHAM. I don't think they have any idea. We have reached out quite a bit and got very little feedback. I think the power generators——

Mr. WHITFIELD. Yes.

Mr. GRAHAM [continuing]. Have an idea of what this is going to cost——

Mr. WHITFIELD. OK.

Mr. GRAHAM [continuing]. But I think the financial impact, and we really haven't put out—

Mr. WHITFIELD. OK.

Mr. GRAHAM [continuing]. What we propose that some of the numbers are until we get the final plan coming back.

Mr. WHITFIELD. Do you think they understand, Mr. van der Vaart?

Mr. VAN DER VAART. No, sir.

Mr. WHITFIELD. OK. Now, Mr. Graham, you talked about you viewed this as unfair and very costly. Is that your honest opinion of the impact of this regulation on the state of Florida?

Mr. GRAHAM. Without a doubt. What gets me, and you see in all of the EPA's data, that they said they want to decrease 30 percent of the CO₂ emissions from the 2005 numbers. Now, one of the things that Florida has already done from 2005 to 2012, we have already jumped ahead of a lot of this stuff. We switched a lot of things over to natural gas. We are, right now, about 65 percent natural gas. We have done a lot of other improvements since then, and for you not to take into account, because they are using 2012 as the baseline.

Now, the problem we run into there is that was an all-time low for natural gas, so we are using so much more natural gas, so the carbon emission that they are putting out there is so much lower than it was, like I said, back in '05. And so I think—

Mr. WHITFIELD. OK.

Mr. GRAHAM [continuing]. It is unfair that we are not getting that credit.

Mr. WHITFIELD. Thank you. My time has expired.

At this time, recognize the gentlelady from Florida, Ms. Castor, for 5 minutes.

Ms. CASTOR. Thank you, Mr. Chairman. Thank you to the panel.

Mr. Graham, it recently came to light that Florida Governor Rick Scott has an unwritten policy that bans the use of the terms climate change and global warming. A number of state employees and scientists from the Florida Department of Environmental Protection, the Department of Health, the water management districts, the Florida Department of Transportation, have all come forward and said this is the case. I read your testimony. Nowhere in your testimony does it use the term climate change or global warming. Is that a product of Governor Scott's unwritten policy?

Mr. GRAHAM. Absolutely not. I was told to come here and talk about what the financial impact is going to be of implementing 111(d), and so that is why that was in my written testimony.

Ms. CASTOR. Well, and I find your testimony very curious because the Florida Public Service Commission has not been on the side of consumers, and they have not, your words, you say the Clean Power Plan threatens affordability for consumers, and the commission will protect consumers from excessive costs, but let me give you a few examples of the costs that Florida has heaped on our customers. The PFC recently gutted energy efficiency initiatives, even though efficiency can meet demand at a much lower cost, at a fraction of the cost of building new power plants, and can help customers reduce energy use, put money back into their pocket, create jobs at the same time. I mean we would see larger sav-

ings on bills, but that is not the business model in Florida. So those stunning rollbacks in energy efficiency, especially at a time when we have to be looking for ways to save on carbon pollution and save money.

Here is another example. The Public Service Commission has really worked over the past years to stifle renewable energy in Florida, and especially solar. You recently stated at a Public Service Commission hearing that Florida, sunshine state, branding is nothing more than a license plate slogan. Well, I hope everyone was watching the weather over this past winter. Florida is the sunshine state. We rely on tourism.

You cited a national renewable energy lab report, but, in fact, that report from July 2012 said Florida is indeed ranked third in the nation for total estimated technical potential for rooftop solar voltaics in the U.S. That same report said Florida clearly has the best solar resource east of the Mississippi River, but the commission has scrapped solar rebates, also going to cost us money, especially with the new requirements of the Clean Power Plan.

And then the best example is what the Public Service Commission and the legislature has done to increase bills, especially if you are a Duke Energy customer. And my colleagues might not be aware, but Florida had adopted an advance recovery fee that allowed the utilities to collect costs in advance for building power plants. And in fact, even when Duke Energy had to scrap a power plant and had to put another one on mothballs, without creating one kilowatt hour of energy, customers in my neck of the woods, in central Florida, are on the hook for \$3 billion, and that is modest, in costs. \$3 billion, not one, not one kilowatt in energy.

So when I hear you talk about affordability, and that you are really concerned about the consumers, the record simply does not support that in the state of Florida.

I want to give you time to respond, but we have an obligation, we have a shared obligation, to confront these issues. And I am sorry, I am going to give you a little time to recover, but think about the state of Florida, what consumers are going to have to pay in storm water damage, costs to re-nourish beaches, what if we have a more powerful storm, that comes out of property taxes. You are looking at it in a very constrained way; a utility concentric way, and that is not reality in our state. Go ahead.

Mr. GRAHAM. Thank you. We cut back a lot on the energy efficiency programs because we have done so much so far. As you heard me say earlier, since we started this program, we have achieved 9,330 gigabytes worth of—

Ms. CASTOR. Mr. Graham, that is simply not the case. There is report after report after report that says the state of Florida is so far behind. Now we are down to about zero in our energy efficiency goals because the business model is backwards. It is not a model that helps address the modern challenges. It is all about how much energy you can sell. And utilities now need to be compensated for helping consumers save money. And I really recommend that you take this obligation seriously and think about the cost to consumers from here on out.

Thank you.

Mr. WHITFIELD. Ms. Castor's time has expired.

At this time, recognize the gentleman from Texas, Mr. Barton, for 5 minutes.

Mr. BARTON. Well, thank you, Mr. Chairman. I had meetings in my office so I have been listening to the hearing on the television in my office, and I want to commend all four of our panelists. I thought your testimony was excellent.

I am going to start off with a basic question for each one of you. We will start with you, Mr. Butler.

Are the requirements in this Clean Power Plan necessary for Ohio to meet any pending nonattainment areas in your state?

Mr. BUTLER. No, sir. No.

Mr. BARTON. OK. Ms. Backman, from Maryland.

Ms. SPEAKES-BACKMAN. Speakes-Backman. Yes, sir. The programs that we already have in place in Maryland have us in good stead to meet the goals of the Clean Power Plan.

Mr. BARTON. So it is not necessary in Maryland, OK.

Gentleman from—

Mr. GRAHAM. No, sir.

Mr. BARTON [continuing]. North Carolina.

Mr. GRAHAM. It is not necessary.

Mr. BARTON. And from Florida.

Mr. VAN DER VAART. Florida—

Mr. BARTON. Florida. North Carolina. I have you backwards.

Mr. VAN DER VAART. But the same answer, no.

Mr. BARTON. So this is not a necessary thing under the Clean Air Act amendments to meet any standards for nonattainment. In fact, is it a true statement that nothing in this Clean Power initiative sets a standard of emission reduction in your state? Is that a true statement? There is not a target you have to meet in terms of parts per million or anything like that?

Mr. BUTLER. It is not, sir.

Mr. BARTON. It is not. Is it a true statement that what this is is social planning imposed on your state by the Federal Government? We will start with you, Mr. Butler.

Mr. BUTLER. We believe it is an unprecedented act—unprecedented action that, frankly, has not—does not have any congressional intent behind it.

Mr. BARTON. OK. Now, Ms. Speakes-Backman, I was impressed with what you said in your testimony. It sounds like Maryland is part of a regional group that has voluntarily come together, set your own goals, and increased your renewable energy portfolio, and done quite a bit of good things, but you did that because the compact or the coalition that your state is a part of made a voluntary decision to do that. Is that not correct?

Ms. SPEAKES-BACKMAN. Yes, sir. We voluntarily decided to take control of our environment, of the reliability issues that we were facing, and with cost increases to our ratepayers.

Mr. BARTON. And I have no problem with that. I think that is good and I am glad Maryland is doing it, but how would you feel if we passed a law here that said Maryland had to use triple the amount of Texas-produced natural gas in that? Would you like that? Clean-burning Texas natural gas, I might add.

Ms. SPEAKES-BACKMAN. Well, seeing, sir, that we use plenty of Pennsylvania clean natural gas—

Mr. BARTON. I understand, and I am not here to——

Ms. SPEAKES-BACKMAN. But——

Mr. BARTON [continuing]. Knock Pennsylvania, but my point is——

Ms. SPEAKES-BACKMAN. But, sir, I think the issue—I think the question that you are asking me is about being forced to use one particular type of fuel or another, which is not necessarily how this Clean Power Plan is structured. This Clean Power Plan is structured——

Mr. BARTON. Well, in the case of Texas, if Texas decides to try to comply with this, we have to shut down 45 percent of our existing coal-fired power plants; two of which are in my old congressional district. Those two power plants are the economic linchpins in their counties. These are rural counties in south central Texas. One power plant has been there over 40 years, the other power plant has been there 25 years. I mean they are the economic mainstay in those particular counties, and they would be shut down. They would be shut down for no environmental reason. No environmental positivism. None.

As the gentleman from West Virginia or Virginia pointed out, you know, $\frac{9}{10}$ of 1 percent decrease in CO₂ over a 30 or 40-year period. I mean it is crazy.

The chairman asked a question about why the 13-year—month period to—13-month period to comply, and you all were very polite about giving non-answer answers, but I think the reason is because the Obama Administration is going to be out of office, and they want this thing put in while they are still in office. Now, that is speculation on my point, but it is informed speculation.

Again, I have no problem with what any of your states are doing, and I am extremely impressed with what Maryland is doing. I think that is a good thing. I believe in states' rights. New York doesn't want to allow hydraulic fracturing, so they don't. Pennsylvania allows it, but with different reporting requirements than Texas. I believe in federalism, it is a good thing, but I don't believe in this new Clean Power Plan initiative that is imposing a social policy on the states, with no environmental benefit and no real opt-out provision.

With that, Mr. Chairman, I yield back.

Mr. WHITFIELD. Gentleman yields back.

At this time, recognize the gentleman from New Jersey, Mr. Pallone, for 5 minutes.

Mr. PALLONE. Thank you, Mr. Chairman.

Commissioner Speakes-Backman, I wanted to ask you a question about the Regional Greenhouse Gas Initiative.

Ms. SPEAKES-BACKMAN. Any time, sir.

Mr. PALLONE. I wasn't here for your testimony. I had to go to another committee hearing, but in your testimony you state that through 2013, RGGI states reinvested over \$950 million of auction proceeds and energy efficiency, clean and renewable energy and other strategic energy programs. And you note that these proceeds have helped low-income families pay their energy bills, supported energy efficiency upgrades, and helped families and businesses install solar, wind, and geothermal systems at their properties. In

fact, under RGGI, just last week, the sale of 15.3 million carbon dioxide allowances netted \$82 million and set a record high price.

So the question is, the RGGI program seems to be the most effective and efficient way for states to meet the standards set forth in the EPA's Clean Power Plan. Can you tell me about the environmental and economic benefits this is providing to the state of Maryland?

Ms. SPEAKES-BACKMAN. Yes, sir. Thank you for the question. And, yes, in fact, there were an additional \$82 million just last Friday announced in our just last previous auction.

In Maryland specifically, we have reinvested the auction proceeds in consumer benefit programs. It has helped more than 215,800 low-income Maryland families to pay their energy bills. It has supported energy efficiency upgrades at 11,800 low-to-moderate income households, helped 5,206 families, and 201 businesses in Maryland to install solar, wind, and geothermal systems.

Mr. PALLONE. So I mean obviously, the program has been tremendously effective in Maryland and other participating states, and these states are going to have a leg up when it comes to meeting the EPA standards.

Now, I am just mentioning this in part because that is why I am so disappointed that, in my home state of New Jersey, our governor, Chris Christie, has withdrawn our state from the program, as you know. And not only is this going to hinder New Jersey's ability to meet the EPA standards, it is actually costing the state money. According to an analysis by Environment Northeast, since New Jersey withdrew from the RGGI program in 2011, the state has passed up more than \$114 million in potential revenue, and the state could miss out on an additional \$387.1 million through 2020, and those figures don't even account for the record price for allowances hit at the RGGI auction last week, which you mentioned. That is money that could be used to use support energy efficiency upgrades and job creation, like it is doing in Maryland and other participating states. So I know he is not with us here today, but I have called on Governor Christie to reconsider his decision to withdraw from RGGI because I think New Jerseyans deserve to reap the benefits of this successful, economically-efficient program, which is reducing carbon emissions and creating jobs in the northeast.

Now, I have about a minute and a half. I know that—if you wanted to respond to some of the questions that were asked before that maybe you didn't have time for, you could use the time to do that, unrelated to my question.

Ms. SPEAKES-BACKMAN. Thank you very much, sir.

May I just add that the car analogy in the panel before was so interesting to me in that, you know, what can be done in—for the car is a catalytic converter, but to me, when I think about a mass-based regional program such as RGGI, and taking that same analysis, it is like having a catalytic converter but then you put a variable toll on the roads that is outside the box. Right? It is outside the car system. And putting a toll on those roads, you can take the money and you can reinvest that in R & D so that you can further improve the equipment that is put on the car to reduce emissions. But in addition, you can take those revenues and further control

traffic by putting the tolls on certain roads that are busy. You can do things like improving those roads themselves. There are ways to reinvest and to make this a positive.

I don't think it is mutually exclusive to help your environmental goals and to build your economies.

Mr. PALLONE. All right, thank you so much.

Thank you, Mr. Chairman.

Mr. LATTA [presiding]. Thank you very much. And before I recognize myself for 5 minutes, I would like to ask unanimous consent from the committee to enter a letter dated December the 1st, 2014, from Director Butler of the Ohio EPA to the respondent and also the executive summary. And these documents were submitted to the U.S. EPA as part of their comments to oppose the Clean Power Plan.

Without objection, so ruled.

[The information appears at the conclusion of the hearing.]

Mr. LATTA. If I could start, Director Butler, and also to all of our panel, thanks very much for being here. Again, it has been very informative.

But, Director, if you would, would you expand on the reference you made to the differences in the 2005 and 2012 baselines, and how this would affect Ohio by not taking into consideration the early action that many have taken to improve that efficiency?

Mr. BUTLER. Mr. Chairman, thanks for the question. And I think Mr. Graham made a couple of very relevant points in his testimony to this fact as well.

Ohio has many utilities that are very early adopters in making sure that their plants run as efficiently as possible. Frankly, the hundreds of millions of dollars that they have invested will be left on the cutting room floor, if you will, if the Clean Power Plan, which talks about a 2005 implementation date, is passed. In reality, that date of looking to develop a plan is all based on the year 2012. So any emission reductions or, frankly, efficiency improvements that have been made prior to 2012 will not count. We think that that not only disincentivizes our utilities from doing that work, but it, frankly, also makes it much more difficult for them to comply, if not exceptionally more expensive for them to comply going forward with meeting the new bucket 1 requirements of having a 4 to 6 percent energy efficiency improvement.

Further, we have talked to our utilities as part of our dialog and comments on the Clean Power Plan. They think it is fundamentally very difficult, if not impossible, to reach that 4 or 6 percent efficiency improvements at our existing utilities. Our fleet has gotten much more efficient, ironically because many of those units were shut down because of the mercury standard, others were improved because they wanted to be more efficient and generate more power into the grid. But those costs were heavy, and they think that a 1 to 2 percent improvement would be all that they could develop to comply with the Clean Power Plan.

Mr. LATTA. Thank you. If I could continue, Director, could you also explain the issues you foresee with the costs and the efficiency related to the EPA's building block number two, which will result in the natural gas-fired units used for base load power in coal-fired plants into peaking power?

Mr. BUTLER. Mr. Chairman, I think the earlier reference about the Clean Power Plan fundamentally is changing the electric distribution market from really one that is based on cost, to one based on environmental impact, and that is a serious, serious problem. In addition, just the discontinuity between the way EPA has set up the Clean Power Plan bucket one on efficiencies at power plants versus bucket two where they are wanting to see natural gas generation run at a 70 percent rate. I think we see two fundamental problems. One is we will see significant closures and—as we already have of our coal-fired fleet, and we will see some, but I don't know yet how much natural gas generation come online. There is a disconnect on how those work, so we are really concerned, as many others are, about the power grid being able to supply power.

Fundamentally, we also find an inconsistency here. While EPA is requiring or suggesting that the power plants become more efficient, and invest hundreds of millions of dollars to do that, that they not be allowed to run to recover those costs because they are then driving gas to take over that capacity.

Mr. LATTA. Well, when we look at Ohio, right now, is Ohio about 71 percent coal-fired?

Mr. BUTLER. Yes, sir.

Mr. LATTA. And when you look down the road at what the EPA is ordering, and it was already discussed, I think, by the chairman, the question really comes then to, with all these costs being put onto these power plants, who is going to pay for that in the long run?

Mr. BUTLER. Right. Mr. Chairman, we are very concerned because we think all of those costs get passed onto the consumers of Ohio.

Mr. LATTA. Especially when you have put out in your discussions with the EPA, have they even talked about what the consequences are? Do they look at what it would do to a state like Ohio with 71 percent coal generated, especially for our business communities and the people that work in those factories and businesses?

Mr. BUTLER. Mr. Chairman, I believe they probably do think about Ohio, although we were very concerned, frankly, dismayed, when U.S. EPA—they do talk about they have had some extensive outreach across the country, and they did attend listening sessions across the country. We, frankly, invited, as did our states in West Virginia and Kentucky, to come to any three of our states and hold a listening session to see and hear from the general population that were actually going to be very much impacted by this Clean Power Plan, and they elected not to come to any of our three states.

Mr. LATTA. So you put on an invitation and they just did not come.

Mr. BUTLER. Yes, sir.

Mr. LATTA. Thanks very much.

My time has expired, and the chair will now recognize Mr.—

VOICE. Mrs. Capps.

Mr. LATTA [continuing]. The gentlelady from California, Mrs. Capps, for 5 minutes.

Mrs. CAPPS. Thank you, Mr. Chairman, for holding this hearing. And I want to thank all of our witnesses for your testimony.

It is so clear that the power sector is responsible for a major portion of carbon dioxide emissions in the United States, but it is also clear that these emissions are causing our planet's climate to change at an unprecedented rate. We need to act today to curb these emissions and prepare for the consequences that are forecast. Fortunately, and, Ms. Kelly Speakes-Backman, you spoke to this, that the Regional Greenhouse Gas Initiative, or RGGI, has really impressively reduced emission rates, and has done so while also improving the regional economy and fostering job creation. My colleague from New Jersey asked you about that, and unfortunately, apparently, his state of New Jersey has backed away from it, but I hope that this momentum will build. I think it is clearly possible to increase energy efficiency, reduce emissions, and provide affordable energy for local residents.

So in addition to carbon emissions, the power sector generates so many other harmful pollutants, including sulfur dioxide, nitrous oxide and mercury, to name a few. In addition to exacerbating the impacts of climate change, these pollutants have direct impacts on human health, leading to increased rates of respiratory problems, contributing to heart attacks, strokes, and even premature death. This has been documented, and is being documented. The benefits of reducing carbon dioxide and these other pollutants under the Clean Power Plan will likely have benefits that far outweigh the cost of implementation, especially in the health sector.

And I wanted to ask you how this implementation of RGGI has affected the benefit of human health in your area.

Ms. SPEAKES-BACKMAN. Thank you for the question. As you know, in Maryland especially, we are a little bit downwind of some of the coal plants that are in the Midwest, and they have directly affected the health and the costs of that health to our citizens. And so as part of the effort that our state has undergone to try to mitigate those health issues, as well as to mitigate the reliability issues that we have had from frequent storms, increasing frequency and severity of storms, the costs our ratepayers have had to incur in order to build up resilience against such storms, there are lot of costs aside from the work that is going to be done under the Clean Power Plan that need to be taken into account when you are doing a full cost benefit scenario.

Mrs. CAPPS. Yes. Thank you. Significant reductions in sulfur dioxide and nitrous oxide and mercury has benefitted over the long haul, but they are offset by downwind and other aspects that tell us that we are not fully where we want to be yet.

Mr. Butler, I wanted to turn to you, if I could. In August of last year, the waters off Lake Erie, off the coast of Toledo, experienced a harmful algae bloom that impacted drinking water for about 400,000 people. Am I correct?

Mr. BUTLER. Yes, ma'am.

Mrs. CAPPS. The science is increasingly clear that harmful algal blooms will become more severe a frequent in the future due to climate change. This means more human health costs, more taxpayer dollars spent on clean-up, unless we take action to reduce carbon emissions. In your testimony, you focused exclusively on the financial costs of implementing the Clean Power Plan, but, you know, in the constraints of time perhaps you weren't able to reach any

of the benefits. Would you agree that human health benefits such as fewer harmful algal blooms and cleaner air, should all be considered in doing a full assessment of the Clean Power Plan?

Mr. BUTLER. Mrs. Capps, if you have an opportunity, in our extensive comments, we submitted U.S. EPA, and then were brought into the record today—

Mrs. CAPPS. Great.

Mr. BUTLER [continuing]. You will see an extensive summarization of our issues related to this issue about suggesting that there will be significant human health improvements by regulating carbon.

Mrs. CAPPS. Yes.

Mr. BUTLER. We do not believe that is the case, and do not believe that the science proves it. Now, however, in a lot of reductions that come along, we have improved our sulfur dioxide and ozone emissions in Ohio and in our downwind states. I mean we do not deny the fact that there have been many, many, many improvements to public health, but I think it is not appropriate to tie that back to CO₂ emissions—

Mrs. CAPPS. Perhaps that needs to be—

Mr. BUTLER [continuing]. Close to the Clean Power Plan.

Mrs. CAPPS. Perhaps we need to do more studies along that health. The EPA's proposal, I believe, the Clean Power Plan, is an important step forward in combatting climate change, will ultimately lower. How this is impacted, as your colleague sitting next to you indicated, it takes some time and I believe we should go further into studying the effects of changes that are being made more thoroughly as they relate to regional and other factors. And this is all about the health of our constituents.

And I know I am out of time, so I support this plan, and I am going to yield back now.

Mr. WHITFIELD. At this time, I recognize the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you, Mr. Chairman.

The gentlelady just referenced it in her comments about her concerns about global warming and the health concerns, and then she went on to say that maybe we need to take some more time, we need more studies on the health. Mr. Butler, it is my understanding that, in fact, the EPA has not done any science on this particular regulation and how much it would change climate change, but that using the normal EPA modeling procedures, the American Coalition for Clean Coal Electricity did run an analysis on how much the rule would reduce climate change, and the American Coalition for Clean Coal Electricity found that atmospheric CO₂ concentrations would only be reduced by less than 1 percent in 2050, the increase in global average temperature would only be reduced by $\frac{16}{1000}$ of a degree Fahrenheit in 2050, sea-level rise would only be reduced by .3 mm or $\frac{1}{400}$ of an inch. This is the equivalent of a piece of paper, or a couple of pieces of paper. And so taking that all into consideration—well, first let me say, do you know of any other studies out there, other than the one that I have referenced, that indicate there is going to be some huge change to what sometimes is referred to as global warming, but more com-

monly, particularly in the east, is referred to as climate change, since warming hasn't happened?

Mr. BUTLER. Yes, Mr. Griffith, I am unaware of any additional studies. We did a very extensive search when we did our comments on the Clean Power Plan, and the ones that you referenced are many of the studies that we also took a look at as part of our review of the Clean Power Plan.

Mr. GRIFFITH. OK, but you don't have any direct numbers from the EPA themselves?

Mr. BUTLER. We do not.

Mr. GRIFFITH. And notwithstanding the fact that they haven't taken the time, that Mrs. Capps referenced, maybe to look at this matter and the health studies, et cetera, and whether or not this would affect anything, this rule is coming down your state's throat any day now, isn't it?

Mr. BUTLER. Yes, sir, it is. We are very concerned about the resources that it will take on our state levels to, on the one had have these discussions and perhaps even legal issues around the implementation, but at the same time go down the path of having to commit our state resources to develop an implementation plan that, at the end of the day, one, may not be necessary, two, that may change significantly from where we started.

Mr. GRIFFITH. Right. And so your folks are being forced to go forward, even though there are all kinds of legal implications going on. And as you could probably tell from the previous panel and the debate there, I am very well versed, and I believe the EPA does not have authority. We will stay tuned to see what the courts say, but I don't think you can change the law just because you find some reference in the closet that says that maybe there was a different interpretation, because if either side adheres to their position, there is no bill. Senate said it receded.

Without getting into all that legal argument, Secretary van der Vaart, your state is going to have to comply even though the legalities and the fight over the legalities may continue, you have to go ahead and get a plan out there. Isn't that true?

Mr. VAN DER VAART. Well, that is right, and I think that that is why I am here. There are a lot of things we can say. I applaud Maryland and the rest for doing what they want to do. North Carolina has made major reductions since the 2005 date. America generally has dropped its carbon dioxide emissions from 2010 to 2013 by 10 percent, and it was all done without the benefit of a federal action. It was done primarily by the revolution that is our natural gas production here in America.

But yes, the concern we have is developing legislation, developing rules, our utility regulatory system has to be altered—

Mr. GRIFFITH. And you will spend a lot of money going down that path, and then the Supreme Court comes out a year and a half, 2 years, 3 years from now and all of a sudden, it all has to start over again.

Chairman Graham, your power plants are facing that same problem, but even if this thing goes forward, a number of them are going to have to be shut down before their useful life ends, isn't that correct?

Mr. GRAHAM. That is correct. We are about 20 percent coal in Florida. Like I said, we switched to a lot of natural gas early on, and they are talking about closing down about 90 percent of our coal plants.

Mr. GRIFFITH. And so you are going to be hurting, and also that means that you are going to have some stranded costs, and that means the increased cost we pay will go on to your ratepayers, isn't that correct?

Mr. GRAHAM. It is almost like they paid for the plant twice. They paid for the plant, and they have all this useful life left, and then we have to shut it down.

Mr. GRIFFITH. And the beauty of natural gas and some of the energy revolution is that we can attract jobs back to the United States but we have to have affordable energy, and this plan doesn't do much for the environment, and it damages our ability and our reputation in the world to have affordable energy. Isn't that true? I don't have time for an answer, but I assume that it is with most of you. Ms. Speakes-Backman, I agree you would disagree, but I recognize that, and yield back.

Mr. WHITFIELD. Gentleman's time has expired.

At this time, recognize the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair. And thank you to our panelists for appearing before the subcommittee.

And Commissioner Speakes-Backman, let me address my comments first and foremost to you. Welcome, and thank you for your service as chair of the RGGI Board of Directors. As you have noted, New York is a member of RGGI. In my last workstation before service here in the House, I was president and CEO of NYSERDA, New York State Energy Research and Development Authority, which got me a seat at the RGGI table. And so I am very thankful for your leadership and for carrying forth with the mission of that plan.

As a participant in RGGI, New York has been able to accomplish a great deal. Greater energy efficiency, cleaner air, expanded deployment of renewable energy technologies, and these are just a few of the benefits, many that are arising.

EPA's proposal is just that at this stage; a proposal. I support its goals. As a proposal, I am sure it will evolve and change, perhaps, before the final rule is released. There, however, seems to be a number of utilities and states that are claiming the goals of the proposal cannot be achieved without severe economic hardship, and sacrificing our electricity reliability. You seem to take a different view. Why are you convinced that these predictions are wrong?

Ms. SPEAKES-BACKMAN. Well, thank you for your participation in RGGI as a state, and thank you for the question.

I do take a different position, and in fact, I take the position that RGGI, coupled with our other state policies, has helped us to improve reliability. So specific to the reliability issue, which is very near and dear to my heart, and it is actually part of my legal obligation as a commissioner of the Maryland Public Service Commission, we have implemented RGGI within the construct of existing markets, and that includes the North American Electric Reliability Corporation's oversight of bulk system reliability. It includes

FERC's retaining its authority over the market's design. It includes also reliable dispatch of least cost resources remaining with our grid operation system. So this is not an upending of the systems. We have been doing this for 8 years, and we have had fewer reliability issues because we have been able to support programs such as demand response and energy efficiency to help reduce the load in specifically load pocket areas.

Mr. TONKO. Thank you. And also there are those who would argue that sound stewardship of our environment and economic recovery, the growth of our economy, cannot go hand-in-hand. Are there any stats that you can cite in terms of perhaps job growth in the energy areas that have enabled us to strengthen our economy and provide for cutting-edge new opportunities with innovation as it relates to the energy arena?

Ms. SPEAKES-BACKMAN. Yes, sir. I can speak specifically to the state of Maryland with respect to jobs. I would have to look up that number, but I believe it is in my written testimony, sir, but we have created jobs and we have improved our economy, while we have reduced by 40 percent our carbon dioxide from power plants. And I am sorry, I don't have that number at my fingertips.

Mr. TONKO. Well, I am certain that you also—other participants at the RGGI table representing that array of states, but I think it can be documented that we have grown a new culture of job activity, all while strengthening the environmental outcome, and—

Ms. SPEAKES-BACKMAN. Absolutely.

Mr. TONKO [continuing]. The sense of environmental justice that has been produced by RGGI accompanies that of social and economic justice. So, I think that there is this whole silo effort to look at certain impacts, needs to be looked at in a fuller array, a broad view that provides for a strong context of a better future for all of the states involved.

Ms. SPEAKES-BACKMAN. Absolutely, sir. I just recalled the number. In the first 3 years of our program alone of RGGI, we have created 16,000 job years in our region.

Mr. TONKO. How many, sorry?

Ms. SPEAKES-BACKMAN. 16,000 job years in our region. Based on the further reductions that we made through a program review in 2014, an independent analysis by the Analysis Group has shown that we will add yet another 130,000 job years to our region.

Mr. TONKO. Thank you very much.

And with that, I see my time is up.

Mr. WHITFIELD. Gentleman's time has expired.

Mr. TONKO. I yield back.

Mr. WHITFIELD. At this time, I recognize the gentlelady from North Carolina, Mrs. Ellmers, for 5 minutes.

Mrs. ELLMERS. Thank you, Mr. Chairman. And thank you to our panel, especially to you, Secretary van der Vaart, for being here from North Carolina.

As your position as secretary of DNR North Carolina, and as an attorney, can you reflect a little bit about the discussion that took place on panel 1 about the ambiguities that exist between the rule—the 111 and the 112, especially focusing back to 1990 when it was first put forward?

Mr. VAN DER VAART. Yes, ma'am. Yes, ma'am. That is a good point. The previous discussion, I would warn you all, maybe appears to me, at least, setting up a straw man, the question of whether the codified versus the statute at large language actually controls. The fact of the matter is, it doesn't matter. Even if you take the statute at large, there is no ambiguity, and the reason is in 1990, the Clean Air Act, under Section 112 was fundamentally changed from a pollutant-based program to a source category-based program. And, therefore, the language in the statute at large is entirely consistent with what happened at that point.

Mrs. ELLMERS. Yes.

Mr. VAN DER VAART. And I am afraid that the previous discussion, for one reason or another, may have missed that. And so it is very good that you keep that in mind. Thank you.

Mrs. ELLMERS. And then getting back to some of the—there again, the discussion that took place in the first panel, one of my questions is really about implementation of this, and especially when it comes to 111, in the building block number 4, and there again, Secretary, from your perspective, how can this possibly be enforced, or can you foresee a way that the EPA would actually be able to enforce this on North Carolinians?

Mr. VAN DER VAART. That is a very good question, and we have thought very hard about it. Another misunderstanding that many people have about the Clean Air Act is that somehow 108 and 110 are implemented similarly to 111. That is not the case. When a state fails, for whatever reason, to submit an approvable plan under 110, 108, to protect NAAQS, the state itself is subject to sanctions including highway funds removal. That is not the case in 111.

Mrs. ELLMERS. Yes.

Mr. VAN DER VAART. If we do not submit an approvable plan, there is no downside for North Carolina as such as the government, however, the Federal Government will then enforce directly to the source. And so, Representative Ellmers, you are giving me a specter of what happens to my grandma when she—

Mrs. ELLMERS. Yes.

Mr. VAN DER VAART [continuing]. Doesn't screw in a CFL bulb in her house. Is she going to be thrown in jail by the feds? Am I going to be thrown in jail because I am somehow missing my obligation, or is the utility executive somehow going to get thrown in jail, when really maybe the EPA should be thrown in jail. So—

Mrs. ELLMERS. Well, there again, it is part of that ongoing discussion of comparing apples to oranges and kind of alternative universes when we are talking about this issue.

My final question for you, Secretary van der Vaart, is, there again, looking towards our North Carolinians, is it economically feasible and fiscally responsible for us to foresee a future where we go from a cost-based energy dispatch model to a carbon dioxide-based dispatch model?

Mr. VAN DER VAART. We can put a man on the moon. We can certainly do this, but it will be at a cost, and unfortunately, the people who are going to bear that cost are the ones least able to afford it. It is going to be our lower and middle class folks, it is going to mean the job losses for high-paying manufacturing jobs because

electricity prices is fundamental to siting of new manufacturing. So yes, we can do it. Is it legal? Absolutely not. And, in fact, as you heard, it is already been going on in a more cost-effective manner by the states themselves.

Mrs. ELLMERS. Yes.

Mr. VAN DER VAART. So what we have here is a Federal Government attempt to upend, as I said, the world's greatest electricity system through a little-known codicil in the Clean Air Act.

Mrs. ELLMERS. Thank you, sir.

And I will just close out by saying that North Carolina has made such strides, and thank you, a lot of it is due to your leadership and moving forward on clean energy. And I believe North Carolina, and so many other states that have taken these steps already, need and deserve that credit. So thank you all to the panel.

And thank you, Mr. Chairman. I yield back the remainder of my time.

Mr. WHITFIELD. Gentlelady yields back.

At this time, recognize the gentleman from Ohio, Mr. Johnson, for 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman. I appreciate it. And, Director Butler, thank you for joining us today from the great state of Ohio.

Lot of concerns there about the things that we have talked about this morning. Director Butler, it seems as if the Administration is ignoring the lawsuit that many states, including Ohio, are currently engaged in with the EPA, and instead they are solely focused on the implementation of the rule. Given all the legal issues surrounding EPA's 111(d) proposal, would you support the EPA setting aside the implementation planning until legal challenges are resolved?

Mr. BUTLER. Mr. Johnson, thanks for that question. I think Professor Tribe is far more eloquent than I am on these issues in the previous panel, but I think to your point, I think that is the exact request that we would have and have made to U.S. EPA to have them consider. I look at it from a state resource application. We will likely be, if the Clean Power Plan evolves as a final plan, much like the draft plan, and it still has what we believe are its legal flaws, will be challenging that law with many other states. That will not, unless things change, relieve us from the obligation to be developing at the same time in a parallel path, expending state resources to develop a plan of implementation in a very tight time schedule that, as you have heard, we don't think we can meet. Those are scarce state resources, frankly, we cannot and should not have to expend. So directly to your question, I have advised and asked U.S. EPA, because there is no compelling deadline relative to this issue about carbon, that we set this implementation issue aside and have our requisite debate about the legal issues, and then go from there.

Mr. JOHNSON. Well, let us expound on that a little bit. States like Ohio, and others that we have talked to here today, are implementing a number of new and older EPA regulations ranging from the Mercy and Air Toxics Rules, to particulate matter standards, to new ozone rules. So can you expand a little bit, doesn't this put strain on state resources, and what happens if, on top of all of this,

states also have to implement a final 111(d) rule that eventually could get thrown out in court? And the reason I say that is because we have seen that scenario before. The brick industry invested hundreds of millions of dollars into complying with a set of standards that the courts threw out, and then they got virtually no credit by the EPA for all that investment that they did, and the EPA certainly was not standing there ready to give them their money back.

Secretary van der Vaart, if they do get thrown in jail, they had better not call me for bail money because I am not going to be at the table.

How do you feel about that, Mr. Butler?

Mr. BUTLER. Yes. Mr. Johnson, I—thanks for that question. I think we have seen—we always are trying to comply with our delegated programs and certainly our air programs. We have made tremendous success in air quality in Ohio. We have seen an unprecedented number of regulatory requirements come down the road.

So you mentioned the mercury rule. Not only does that, you know, add to the time commitment and planning and implementation for compliance, it is, frankly, having to shut down $\frac{1}{4}$ of our coal generation fleet in the state of Ohio. So we are concerned about that. Today, ironically, as we sit here is the same day that we are required to submit our comments on the proposed new ozone standard, and we are just on the cusp of, frankly, getting to the point of being statewide full compliance of the 2008 ozone standard. I would love to, frankly, declare victory on that and say—but no, we are in a position now where we are having to decide whether or not we need to drop that standard further, and whether or not the science is supportive of that. We are, in addition, in the midst of looking at both the particulate matter and SO₂ rules, and whether or not, frankly, we move down the path of having additional ozone transport regulations. And the list goes on.

So that puts an incredible strain on us as state regulators and implementers, and is, frankly, just an additional cost that we are requiring to our legislature to pass on to customers.

Mr. JOHNSON. Well, thank you.

Secretary van der Vaart, do you have a comment on that as well?

Mr. VAN DER VAART. Well, I would just like to emphasize again, America is moving toward cleaner energy. It is moving that direction because of the free market and our revolution in natural gas exploration and production. We are all states doing what we think is right in cleaning up the environment, and I think it is not a time to rush to judgment when we have such a flawed proposal.

Mr. JOHNSON. Thank you very much.

Mr. Chairman, I yield back.

Mr. WHITFIELD. The gentleman's time has expired.

And I want to thank all four of you for joining us today to discuss this significant issue.

I would like to also include the following documents in the record. Comments submitted to EPA on the proposed 111(d) rule by the Florida Public Service Commission, and the Florida Office of Public Counsel.

[The information appears at the conclusion of the hearing.]

Mr. WHITFIELD. And we will keep the record open for 10 days. I was going to come down and say hello to each one of you personally, but we have a vote on the floor and it is almost 15 minutes gone now, so I am going to rush out, but we look forward to working with you. Thank you very much.

And that adjourns today's hearing.

[Whereupon, at 1:39 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

STATE OF FLORIDA

ART GRAHAM
CHAIRMAN



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Public Service Commission

December 1, 2014

Via e-mail: A-and-R-Docket@epa.gov

Administrator Gina McCarthy
Air and Radiation Docket and Information Center
Environmental Protection Agency
Mail Code: 2822T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Carbon Pollution Emission Guidelines for Existing Sources: Electric Utility Generating Units; Docket ID No. EPA-HQ-OAR-2013-0602

Dear Administrator McCarthy:

The Florida Public Service Commission authorized on November 25, 2014, the filing of the attached comments on EPA's June 18, 2014 proposed rule on carbon dioxide emissions from existing fossil fuel-fired electric generating units. The staff contact on these comments is Mark Futrell, who may be reached at 850-413-6692.

Sincerely,

A handwritten signature in black ink, appearing to be "AG".

Art Graham
Chairman

AG/ao

cc: Commissioner Lisa Polak Edgar
Commissioner Ronald A. Brisé
Commissioner Eduardo E. Balbis
Commissioner Julie I. Brown

**UNITED STATES OF AMERICA
BEFORE THE
ENVIRONMENTAL PROTECTION AGENCY**

Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility
Generating Units

Docket ID No. EPA-HQ-OAR-2013-0602

COMMENTS OF THE FLORIDA PUBLIC SERVICE COMMISSION

The Florida Public Service Commission (FPSC or Commission) respectfully requests the consideration of comments as provided herein on the proposed Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, also referred to as the Clean Power Plan (Proposed Rule).¹ The FPSC recognizes the necessity and role of the U.S. Environmental Protection Agency (EPA) in addressing public health and environmental issues. The FPSC is concerned, that the Proposed Rule in its current form will reduce fuel diversity, adversely impact reliability, and impose unacceptable cost increases for a large number of Florida's electric consumers. Even with the clarifications provided by EPA's October 2014 Notice of Data Availability (NODA), the structure of the Proposed Rule is such that meaningful comments require unique knowledge of each state's compliance plan and predetermination of the reasonable achievability of EPA's modeled emission performance requirements. Without knowing the structure of the State Implementation Plan, the FPSC cannot address the achievability of EPA's proposed emission performance requirements through EPA's best system of emission reduction (BSER) approach or any other compliance approach with certainty. The comments below highlight the particular attributes of Florida and its electric industry, the FPSC's statutory authority, concerns with the Proposed Rule, and areas of concern with EPA's proposed interim and final emission performance requirements for Florida.

¹ The FPSC previously provided input into EPA's development of proposed standards for carbon emission reductions from existing sources by letter of December 13, 2013, The Florida Public Service Commission's Responses to EPA's Questions to States Regarding the Design of a Program to Reduce Carbon Pollution from Existing Power Plants (FPSC December 13, 2013 Comments).

These comments presume EPA will adopt carbon emission rules based on the strategy, or a similar strategy, in the Proposed Rule notice. The Commission's comments contained herein are meant to request Florida-specific considerations for the application of the Proposed Rule and should not be construed as support or opposition to EPA adopting carbon emission rules, or agreement that the EPA has the authority to regulate carbon dioxide (CO₂) emissions from existing power plants under Section 111(d) of the Clean Air Act.

FPSC Concerns and Recommendations to EPA:

A. FPSC Jurisdiction

- Do not bypass or preempt the FPSC's exclusive jurisdiction under Florida Statutes.
- Defer to the Public Utility Regulatory Policies Act and Florida laws when calculating renewable energy potential for Florida.

B. Best System of Emission Reduction (BSER)

- The BSER has not been adequately demonstrated based on Florida policies and circumstances.
- Set standards only for affected EGUs based on specific technology and equipment at these facilities or other onsite actions within a utility's control.
- A multi-year average baseline should be used instead of a single year in the development of emission performance requirements.

C. Recognition of Early Actions in Florida

- Florida's requirements should reflect recent actions by Florida's electric utilities that have reduced carbon emissions.

D. Interim Performance Requirement

- Florida's interim emission performance requirements should not be mandatory.

E. Corrections to Building Blocks

- Modify Florida's emission performance requirements applied to Florida's coal-fired generation to recognize prior actions taken to improve heat rates.
- Correct Florida's interim and final emission performance requirements to reflect the natural gas combined cycle net, not gross, capacity.
- "At risk" nuclear generation should not be used to calculate Florida's requirements.
- Adjust the renewable energy generation requirement to reflect Florida-specific policies and circumstances.
- The EPA's emission performance requirements should not include mandatory implementation of end-use energy efficiency programs, but should allow for voluntary inclusion within a State Implementation Plan.

F. FPSC Concerns Regarding Proposed Rule Implementation

- The Proposed Rule compromises Florida's ability to maintain a diversified generation fuel source mix.
- The rapid addition of large scale intermittent generating resources may compromise grid reliability.
- Allow Florida to incorporate a reliability safety valve into its State Implementation Plan to guard against unforeseen impacts on reliability and cost.
- The proposed emission performance requirements will likely require substantial compliance costs for Florida.

I. FPSC Jurisdiction

The FPSC is charged with ensuring that Florida's investor-owned electric utilities provide safe, reliable energy for Florida's consumers in a cost-effective manner. The FPSC regulates five investor-owned electric utilities, including aspects of rate setting, operations, and safety. The FPSC additionally regulates 35 municipally-owned and 18 rural electric cooperatives as to safety, rate structure, and oversight of generation and transmission planning.

The FPSC's exclusive jurisdiction in Florida includes jurisdiction to require electric power conservation and reliability within a coordinated grid, for operational as well as emergency purposes.² The FPSC has exclusive jurisdiction over the planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy and the avoidance of further uneconomic duplication of generation, transmission, and distribution facilities.³ The FPSC is charged with determining need for all new steam electric generating facilities and solar generation over 75 megawatts (MW).⁴ The FPSC has the responsibility of allowing an electric utility's recovery from ratepayers of prudently incurred environmental compliance costs, including costs incurred in compliance with the Clean Air Act.⁵

² Section 366.04(2)(c), Florida Statutes

³ Section 366.04(5), Florida Statutes

⁴ Section 403.519, Florida Statutes

⁵ Section 366.8255(2), Florida Statutes

In addition, the FPSC has exclusive jurisdiction to implement the Florida Energy Efficiency and Conservation Act (FEECA).⁶ FEECA emphasizes reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, and reducing the consumption of expensive resources, such as petroleum fuels. Pursuant to FEECA, the FPSC has authority to adopt goals for increasing the efficiency of energy consumption and increasing the development of demand-side renewable energy systems.⁷ Importantly, in adopting these goals, the FPSC evaluates the full Florida-specific technical potential of all available demand-side and supply-side conservation and efficiency measures, and takes into consideration the costs and benefits to participating customers and ratepayers as a whole, and the costs imposed by state and federal regulations on greenhouse gas emissions.⁸ Once goals are established by the FPSC, the utilities must submit cost-effective demand-side management (DSM) plans, which contain the DSM programs designed to meet the approved goals. Among its powers, the FPSC may modify or deny demand-side management plans or programs that would have an undue rate impact from the costs passed on to customers.⁹

The Florida Legislature has established policies to encourage the development of renewable energy resources and to ensure these resources contribute to reliable electric service at a reasonable cost. Florida law requires utilities to facilitate customer-owned renewable energy resources through standard interconnection agreements and net metering.¹⁰ The Public Utility Regulatory Policies Act (PURPA) and Florida law establish requirements relating to the purchase of capacity and energy by investor-owned electric utilities from renewable energy producers.¹¹ Utilities must purchase capacity and energy at rates that do not exceed the respective utility's avoided cost, thus protecting customers from undue rate impacts. Also, renewable energy producers, which are able to meet minimum performance requirements during a respective utility's peak demand period, are eligible for fixed capacity payments. Investor-owned utilities may recover from customers prudent and reasonable costs associated with renewable energy purchase power agreements. PURPA and Florida law provide the legal

⁶ Sections 366.80 – 366.82, Florida Statutes

⁷ Section 366.81, Florida Statutes

⁸ Section 366.82(3), Florida Statutes

⁹ Section 366.82(7), Florida Statutes

¹⁰ Section 366.91(5) and (6), Florida Statutes

¹¹ Sections 366.051 and 366.91(3), Florida Statutes

framework for the interconnection and economic parameters to develop renewable energy. As such, Florida-specific policies should be inherent to the Proposed Rule. Therefore, EPA must defer to existing federal and state-specific policies in its calculation of renewable energy potential for Florida and other states.

The EPA's authority to propose pollution control regulations is limited by the scope of its delegated authority granted under the Clean Air Act (CAA).¹² The CAA authorizes EPA to promulgate regulations on CO₂ emissions only as they relate to pollutant emissions. The EPA has not been granted regulatory authority over Florida's planning, development, and maintenance of a coordinated electric power grid, electric power energy efficiency and conservation, or the development of renewable energy resources in Florida. For this reason, the FPSC's exclusive jurisdiction in these areas is not subject to preemption by the CAA, and the Proposed Rule may not interfere with, pre-empt, or in any manner attempt to or effect a shift of the Commission's jurisdiction to EPA or to any other federal or state agency or department.

Additionally, the FPSC supports the National Association of Regulatory Utility Commissioners Resolution on Increased Flexibility with Regard to the EPA's Regulation of Greenhouse Gas Emissions from Existing Power Plants, which provides in part: "EPA should not intrude on the states' jurisdiction over decisions regarding integrated resource planning or the mix of fuels and resources."¹³ The proposed emission performance requirements set by EPA necessarily require compliance and enforcement activities that include changing dispatch methodology, efficiency measures, the type of generation to be constructed, and renewable energy considerations, all of which are matters within the FPSC's exclusive jurisdiction. Intrusion by EPA into these matters directly through a Federal Implementation Plan or by proxy through a State Implementation Plan would interfere with the FPSC's jurisdiction over the generation and distribution of electricity, Florida's electricity grid, and economic regulation of electric retail service. Any changes to this exclusive jurisdiction are a matter for consideration by the Florida Legislature.

¹² E.g., *City of Park City v. Alon USA Energy Inc. (In re Methyl Tertiary Butyl Ether Prods. Liab. Litig)*, 341 F. Supp. 2d 386, 406-408 (S.D.N.Y. 2004), citing to *Fidelity Fed. Savs. and Loan Association de la Cuesta*, 458 U.S. 141, 154 (1982). See also *City of Arlington v. FCC*, 133 S. Ct. 1863, 1869 (2013) (The power of agencies charged with administering congressional statutes to act and how they are to act is authoritatively prescribed by Congress).

¹³ <http://www.naruc.org/Resolutions/EPAsRegulationofGreenhouseGasEmissionsfromExistingPowerPlants.pdf>.

II. Best System of Emission Reduction (BSER)

The FPSC is greatly concerned with the methodology EPA used to set the BSER and the resulting Florida performance requirements for existing electric generating units (EGUs). As previously noted, EPA's assumptions and analysis supporting its Proposed Rule, and the Florida CO₂ pounds per megawatt-hour (lbs./MWh) emission performance requirements presume an implementation strategy that either bypasses or preempts the FPSC's exclusive jurisdiction under Chapters 366 and 403, Florida Statutes. The EPA's Proposed Rule establishes CO₂ lbs./MWh emission performance requirements using national or regional averages rather than assessing what is reasonable and technically achievable in Florida. Moreover, EPA did not consider Florida-specific policies in developing the Proposed Rule. The CAA requires EPA to set proposed emissions performance requirements to reflect:

the degree of emission limitation **achievable** through the application of the best system of emission reduction which (**taking into account the cost** of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been **adequately demonstrated**.¹⁴ (emphasis added).

When establishing a performance standard based on a BSER determination, EPA must consider among other factors, the system of emission reduction that is technically feasible¹⁵ and the economic costs to the industry.¹⁶ The emission performance requirements must be based on relevant and adequate data, and technology must be achievable for standards promulgated by EPA.¹⁷ Further, "To be achievable, a standard must be capable of being met under the most adverse conditions which can reasonably be expected to recur."¹⁸

¹⁴ CAA, Section 111(a)(1); 40 CFR 60.21(e).

¹⁵ *Essex Chemical Corp v. Ruckelshaus*, 486 F. 2d 427, 433-434 (D.C. Cir 1973)(stating that an achievable standard is one which is within the realm of the adequately demonstrated system's efficiency and which need not necessarily be routinely achieved within the industry prior to its adoption), *cert denied*, 416 U.S. 969 (1974).

¹⁶ *Portland Cement Association v. Ruckelshaus*, 486 F. 2d 375, 385, 402 (D.C. Cir. 1973), *cert. denied* 417 U.S. 921 (1974).

¹⁷ *Id.* p. 393.

¹⁸ *White Stallion Energy Ctr., LLC v. EPA*, 748 F. 3d 1222 (S.D. Cal. 2014), citing to *Nat'l Lime Association v. EPA*, 627 F. 2d 416, 431 n. 46, 200 US App. DC 363 (D.C. Cir. 1980).

The FPSC contends that EPA's proposed BSER in its current form is unreasonable, extremely difficult to achieve both in scope and timeline, and should not be used to set an emissions performance requirement for Florida. While EPA's NODA goes in the direction of acknowledging some of these concerns, it does not provide solutions. The FPSC's comments are intended to offer such solutions.

The proposed emission performance requirements for Florida are not based on a BSER that has been adequately demonstrated, as required by Section 111(d). An adequately demonstrated system is one that has been shown to be reasonably reliable, reasonably efficient, and that can reasonably be expected to serve the interest of pollution control without becoming exorbitantly costly in an economic or environmental way.¹⁹ The EPA's basis for stating that its BSER analysis is adequately demonstrated is that each of the building blocks may be well-established in some, but not all states.²⁰ This basis fails to take into account the Florida-specific factors discussed throughout these comments. The disclaimer in the Notice of Rulemaking that none of the building blocks in the BSER "are being mandated, the states are free to use any compliance strategy" does not alleviate the FPSC's concerns.

As a part of its analysis of the Proposed Rule, the FPSC solicited comments from Florida's generating utilities and other interested persons.²¹ Based in part on the responses, the FPSC believes that EPA's CO₂ emission performance requirements for Florida cannot be met solely by increased efficiency of operating coal-fired units, increased dispatch of natural gas-fired electrical units, and decreased use of coal-fired EGUs. The Proposed Rule would require Florida's utilities to attempt to implement all of the proposed building blocks, despite the fact that these proposed requirements do not take into account Florida's specific policies and circumstances. Therefore, the BSER has not been adequately demonstrated as an effective approach to achieve EPA's proposed emission performance requirements for Florida.

¹⁹ *Essex Chemical Corp.* 486 F. 2 p. 433.

²⁰ U.S. Environmental Protection Agency Legal Memorandum on Proposed Carbon Pollution Emission Guidelines for Existing Electric Utility Generating Units. p. 15.

²¹ <http://www.floridapsc.com/utilities/electricgas/EPAcarbonrules/>

Consistent with the FPSC's December 13, 2013 Comments in this proceeding, the FPSC continues to maintain that EPA should set Florida's emission performance requirement based solely on onsite actions at affected EGUs. As evidenced by both emission rates and mass ton reductions, Florida utilities have made great progress in CO₂ reductions in recent years by repowering existing units and adding efficient natural gas combined cycle units. The EPA should only rely on existing EGUs, including the past actions of these EGUs, in establishing reasonable CO₂ reductions.

Since 1981, the FPSC has established DSM and energy efficiency goals for the utilities serving 85 percent of Florida's load. The EPA's national application of energy efficiency reductions based on existing and new load growth, however, is not an appropriate standard setting strategy. Likewise, PURPA and Florida law provide the legal framework for the development, interconnection, and economic parameters of renewable energy. The EPA must defer to existing federal and state-specific policies in its calculation of renewable energy potential for Florida and other states. The FPSC, however, strongly believes EPA lacks jurisdiction to include Building Blocks 3 and 4 in its BSER and the proposed emission performance requirements. For these reasons, EPA should revise its BSER and the emission performance requirements to be based exclusively on onsite actions at affected EGUs.

The FPSC also believes it is inappropriate to select a single year (2012) in the development of emission performance requirements. This approach does not take into account anomalies affecting the dispatch of generation in a given year, that could occur in a particular state or market. For example, 2012 was not a typical year for electricity generation in Florida as historically low natural gas prices caused an unusual increase in the use of natural gas-fired generation. During a normal year, more coal-fired generation would have been dispatched, resulting in a higher CO₂ annual emission rate for the state. This is particularly true for utilities that are more dependent on coal-fired generation. Therefore, EPA's use of 2012 as the starting point skews the emissions performance requirements for Florida. The use of a multi-year average when setting the baseline data can dampen the effect of any electric market production, weather, or fuel supply anomaly that may occur in a single year.

III. Recognition of Early Actions in Florida

In the FPSC's December 13, 2013 Comments in this proceeding, the FPSC asserted that EPA's guidelines should avoid setting a performance level that is based on a national uniform approach and recognize the varying characteristics of specific states and regions of the U.S. By applying national averages in establishing state-specific emission performance requirements, EPA did not accurately reflect Florida's ability to comply with the Proposed Rule. The EPA's Proposed Rule does not consider past utility actions by Florida's utilities that were made to improve overall generating efficiency. These past actions have had a beneficial impact on air quality and have resulted in permanent CO₂ emission reductions per MWh. Failure by EPA to consider these early actions is unreasonable.

The proposed emission performance requirements would result in a 38 percent reduction in CO₂ emissions from the 2012 baseline year. This, in effect, penalizes Florida for having taken early actions to reduce CO₂ emissions by requiring stringent, and more difficult to attain, emission performance requirements relative to EPA's 2012 baseline year. The long history of early actions in Florida that has contributed to the declining CO₂ emissions restricts the technical feasibility of meeting the national assumptions in EPA's proposed building blocks. The Florida Department of Environmental Protection, for example, estimates that Florida's average CO₂ emissions profile, for power produced in Florida, decreased from 1,718 lbs./MWh in 2005 to 1,291 lbs./MWh in 2012, a 25 percent reduction in CO₂ emission rates. The requirement of an additional 38 percent reduction is unreasonable.

Florida's utilities have invested in generation efficiency improvements, repowerings, and nuclear uprates, which have had a beneficial impact on Florida's average CO₂ emissions profile. In addition, Florida's utilities have invested heavily in compliance with other recent EPA air rules, including Mercury Air Toxics Standards and the Cross-State Air Pollution Rule. Florida's ratepayers have borne the costs for these investments. As a result, a significant portion of cost-effective actions to lower emissions that are under each utility's control has already been achieved through regulatory and market driven responses. The FPSC urges EPA to adjust

Florida's emission performance requirements to reflect a BSER that can be achieved in Florida and accounts for past utility actions.

IV. Interim Performance Requirement

The FPSC believes the aggressive compliance timeframe is unrealistic. The proposed interim emission performance requirement for Florida is only marginally different from the final requirement, and requires a substantial proportion of the 2030 requirement CO₂ emissions reductions to occur beginning in 2020. Although EPA outlines a few avenues for states to have additional time for submitting their compliance plans, the Proposed Rule does not allow corresponding flexibility in the interim performance period. Regardless, Florida will have had to make compliance decisions before there is certainty of EPA's final rule and before having an approved state implementation plan. Compliance with the proposed emission performance requirements necessitates long-term decisions and investments, potential legislative action, and must account for the statutory timing of siting and constructing new generation, transmission, and pipeline capacity that will likely be needed. As such, under Florida's existing statutory and regulatory regimes, the State as a whole will not be able to achieve EPA's proposed emission performance requirements within EPA's timeline.

Compliance with EPA's proposed emission performance requirements will likely take more time than EPA envisioned. Particularly problematic is the time required to complete the necessary infrastructure improvements. Two recent examples in Florida are illustrative of project timing. A proposed nuclear project in southern Florida was originally scheduled to complete the Florida Site Certification Application review within 14 months, yet the review schedule was waived and ultimately extended to almost 60 months.²² The protracted timeline was required in order to address concerns stemming from electric transmission expansion. In 2013, the Commission approved as prudent, a utility's request to enter into a long-term gas transportation contract associated with the proposed Sabal Trail pipeline, which is not expected

²² <http://www.doah.state.fl.us/ALJ/searchDOAH/default.asp>, Florida Division of Administrative Hearings Case No. 09003575.

to commence natural gas delivery until 2017.²³ Whether these cases are typical of future projects is uncertain; however, they illustrate that three years may not be sufficient time to study, permit, and complete infrastructure additions necessary to comply with the interim emission performance requirements. The EPA's 2020 threshold date appears to be more aspirational than realistic when one considers the scope of detailed reviews and justification necessary to support additional power plants, transmission, and pipeline investments that could be needed. The FPSC notes that EPA's NODA appears to recognize the need for increased flexibility to address the timing of various infrastructure projects.

The FPSC asserts that even with the flexibility of expanding timelines, Florida's interim emission performance requirements should not be mandatory. Florida's interim goals, used for tracking or reporting, should be established during the state implementation plan development process. This will allow Florida to review appropriate actions to mitigate the impacts of premature retirements of certain generating units. Florida and the affected entities should be given a more flexible glide path toward the ultimate performance requirement.

V. Corrections to Building Blocks

The following analysis addresses each Building Block individually to illustrate how EPA's assumptions of the building blocks used to establish the BSER are not technically feasible and would result in unreasonable costs. Any suggestion to one particular Building Block should not be interpreted as support to expand other Building Blocks to make up any emissions reduction shortfalls due to the interactive effects between the various Building Blocks and potential operational constraints as discussed throughout our comments.

²³ Order No. PSC-13-0505-PAA-EI, in Docket No. 130198-EI, issued October 28, 2013, In re: Proposed Agency Action Order on Florida Power & Light Company's Proposed Sabal Trail Transmission, LLC and Florida Southeast Connection Pipelines.

a. Building Block 1

In Building Block 1, EPA assumes that Florida will achieve CO₂ reductions through a six percent heat rate improvement at its coal-fired generating units. The FPSC contends that the national assumption of a heat rate improvement of six percent for Florida's coal-fired generating fleet is not technically feasible, given the long history of efficiency improvements to Florida's fleet. In 1980, the FPSC developed a generating performance incentive factor program (GPIF) for investor-owned utilities,²⁴ which encourages utilities to maximize unit heat rate efficiency of electric baseload generating units. Unit specific heat rate and availability requirements are set annually through a formal hearing procedure, and the FPSC has the authority to reward utilities that reach their requirements and penalize those utilities that do not. Effectively, the GPIF program provides multi-million dollar incentives for utilities to maximize supply-side energy efficiency improvements, thus reducing average fuel consumed per MWh at the source of air emissions.

In over 30 years of offering incentives, the FPSC has not seen consistent heat-rate improvements in the six percent range as suggested in the Proposed Rule. In the last five years alone, changes in EGU specific heat rate efficiencies ranged from negative eight percent to positive four percent, even with the GPIF program incentives. These fluctuations appear to be driven, in part, by efforts to comply with environmental requirements. Rather than relying on an across the board six percent assumption, we propose a more Florida-specific analysis of achievable, permanent and cost-effective CO₂ emission reductions. Such an analysis will take into account, not only potential for heat rate improvements (which can be verified through historical data under incentive programs like the GPIF program), but also steps already taken to increase efficiencies in Florida's fleet relative to EPA's baseline.

The EPA has not adequately demonstrated the feasibility of the proposed emission requirements for Florida under Building Block 1. This is supported in part by a recent communication by Sargent & Lundy, LLC, which prepared a study on heat rate improvement

²⁴ Order No. 9558, in Docket No. 800400-CI, issued September 19, 1980, In re: Investigation of Fuel Cost Recovery Clause Application to Investor-owned Electric Utilities.

that was relied on by EPA in its technical support documentation. Sargent & Lundy, LLC, states that its 2009 report on heat rate improvements “did not conclude that any individual coal-fired EGU or aggregation of coal-fired EGUs can achieve six percent heat rate improvement or any broad target, as estimated by EPA.”²⁵ Moreover, Sargent & Lundy, LLC, notes that the feasibility of heat rate improvements at an individual generating unit are limited by “a number of factors, including plant design, previous equipment upgrades, and each plant’s operational restrictions.”²⁶

The FPSC also questions the reasonableness of investing in heat rate improvements only to then retire the plants based on the re-dispatch assumptions in Building Block 2 and the 2020 interim performance requirements. The EPA fails to adequately address the inconsistency of using heat rate improvements in coal-fired units to calculate Building Block 1 savings, only to then substantially negate those savings by re-dispatching from those improved coal-fired units to natural gas-fired units for the savings presented in Building Block 2. While EPA’s NODA appears to allow recognition of the remaining book life, EPA did not identify any corresponding changes to its proposed state interim and final emission performance requirements. The EPA should allow certain coal units with long, undepreciated remaining useful lives to be exempt from an interim emission performance requirement and relax the 2030 requirement, as long as these units are brought into compliance with the state implementation plan at the end of their useful lives. This would ameliorate much of the stranded cost burden associated with a strict adherence to a 2030 compliance date. If EPA does not modify the assumptions of Building Block 1 in the proposed BSER, the rapid retirement of coal-fired generation due to the re-dispatch envisioned in Building Block 2 would cause significant costs for Florida and its ratepayers in terms of stranded assets.

²⁵ Letter from Raj Gaikward Ph.D., VP Sargent & Lundy to Mr. Rae Cronmiller, National Rural Electric Cooperative Association.

²⁶ *Id.*

b. Building Block 2

In EPA's calculation of Building Block 2, EPA states that Florida's natural gas-fired combined cycle (NGCC) plants operated at a capacity factor of 51 percent.²⁷ Based on EPA's assumptions of an increase in NGCC capacity factor from 51 percent to 70 percent of capacity, EPA calculates a re-dispatch of existing 2012 NGCC generation that would result in CO₂ emission reductions. EPA's characterization that Florida's NGCC fleet operated at a "51 percent capacity factor" in 2012 is incorrect due to EPA's use of nameplate capacity. When discussing generator capacity, system planners and state regulators distinguish generator capacity from nameplate capacity for important reasons. A generator's nameplate capacity is "the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer."²⁸ By contrast, the generator capacity is "the maximum output, commonly expressed in MW, that generating equipment can supply to system load, adjusted for ambient conditions."²⁹ The EPA states it wanted to use net generating capacity but asserts, incorrectly, that net capacity data was not readily available.³⁰ Therefore, EPA's choice to use nameplate capacity for purposes of assessing annual capacity factors is not supported by its referenced material.^{31, 32} The FPSC contends that EPA should revise its calculations of assumed reductions under Building Block 2 to reflect the 2012 natural gas combined cycle net, not gross capacity.

The EPA's proposal does not identify the consequences on Florida's electric service reliability, transmission load flow, or the scheduling of how its program of displacing existing

²⁷ U.S. Environmental Protection Agency, Data File: Goal Computation – Appendix 1 and 2, <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents> (last updated June 26, 2014).

²⁸ U.S. Energy Information Administration, Glossary: Generator nameplate capacity, <http://www.eia.gov/tools/glossary/index.cfm?id=G> (last visited July 18, 2014).

²⁹ U.S. Energy Information Administration, Glossary: Generator capacity, <http://www.eia.gov/tools/glossary/index.cfm?id=G> (last visited July 18, 2014).

³⁰ U.S. Environmental Protection Agency, GHG Abatement Measures, 3-6 (June 2014). The U.S. Energy Information Agency's database of Forms EIA-860 contains summer and winter capacities for facilities across the U.S. The EPA even refers to Form EIA-860 elsewhere in the GHG Abatement Measures; therefore, it is inexplicable that the EPA chose to use the theoretical nameplate capacity over the known and modeled summer/winter capacities reported in the documents the EPA used to perform the BSER analysis.

³¹ *Id.*

³² U.S. Energy Information Administration, Form EIA-860 for 2012, available at <http://www.eia.gov/electricity/data/eia860/index.html> (last visited July 18, 2014).

coal-fired baseload facilities could reasonably be implemented.³³ Florida's coal-fired facilities and NGCC facilities are not typically co-located nor generally located within the same utility system. In Florida, the existing transmission system has not been developed with the expectation that NGCC facilities would displace all or most of the baseload coal-fired facilities. Consequently, it would be necessary to conduct a Florida-specific transmission study to assess the full effects of such a program, which the EPA does not appear to have included in its reference material or factored into the proposed compliance schedule. EPA's NODA appears to acknowledge these are significant and material issues. However, no changes to the Proposed Rule were presented. While EPA has assumed future wholesale level transactions between reliability regions, EPA has not provided the FPSC with any support documentation of electric reliability within the Florida Reliability Coordinating Council region and the potential impacts to each of the Florida cooperative, municipal, and investor-owned systems. Absent this type of data, the FPSC does not believe that electric reliability will be maintained if the Proposed Rule is implemented.

c. Building Block 3

EPA assumes growth in renewable energy and the retention of "at risk" nuclear in the calculation of Florida's performance requirements. EPA assumes six percent of Florida's historical nuclear capacity to be at risk based on a generic, non-Florida specific assumption. This assumption has the effect of creating a more stringent performance requirement for Florida and decreasing compliance flexibility. Therefore, the FPSC urges EPA to remove the six percent "at risk" nuclear from the calculation of Florida's performance requirements.

The EPA's adoption of North Carolina's renewable energy and energy efficiency portfolio standard (REPS) for Florida does not realistically reflect the available renewable resources or policy framework in Florida.³⁴ For example, Florida lacks viable wind resources

³³ <http://www.epa.gov/airmarkets/progsregs/epa-ipm/docs/v513/HRI%20Appendix.pdf> and http://www.epa.gov/airmarkets/progsregs/epa-ipm/docs/v513/Chapter_3.pdf

³⁴ The FPSC appreciates the additional information regarding "Framework for Assessing Biogenic CO₂ Emissions from Stationary Sources," issued November 2014, as to how EPA intends to treat biomass generation, including municipal solid waste options. See <http://www.epa.gov/climatechange/downloads/Framework-for-Assessing-Biogenic-CO2-Emissions.pdf>.

and has limited biomass opportunities, given competing industrial use of biomass resources.³⁵ Additionally, baseload solar generation has yet to be a proven commercially available option in Florida.

The EPA elected to group Florida with Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee to form its modeled Southeast region for the purpose of assigning its assumed achievable renewable energy generation requirement. Of that group, North Carolina is the only state that has a REPS requirement. The FPSC contends that EPA has overestimated the assumption for potential renewable energy generation for its southeast region by misinterpreting North Carolina's REPS.³⁶ As a part of North Carolina's REPS, the state's investor-owned utilities are allowed to utilize energy efficiency programs to achieve up to 25 percent of the annual renewable goal increasing to a maximum of 40 percent in 2021. Additionally, North Carolina's REPS allows municipal and co-operative utilities to use energy efficiency programs to achieve all of their annual renewable goals. By using North Carolina's REPS as a component of the BSER, EPA has double-counted the use of energy efficiency, given the interaction between Building Blocks 3 and 4.

The EPA appears to acknowledge the importance of incorporating renewable energy generation based on the actual potential for each state. The approach described in the technical support documentation "Alternative Renewable Energy Approach" may be closer to representing state realities as it relies in part on a technical potential study conducted by National Renewable Energy Laboratory.³⁷ This approach, however, falls short due to the use of EPA's Integrated Planning Model (IPM) to evaluate market potential of each type of renewable generation based on a regional dispatch area and the use of an estimated incremental cost of renewables. The EPA did not provide information regarding the impact on the alternative approach to the emission performance requirements for Florida, specifically whether the adoption of the alternative approach would affect the other Building Blocks.

³⁵ Florida Department of Agriculture and Consumer Services, Division of Forestry, *Woody Biomass Economic Study*, March 10, 2010.

³⁶ N.C. Gen. Stat. Section 62-133.8 (2013).

³⁷ <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-alternative-re-approach.pdf>

In November, EPA released examples on how to convert the rate-based performance requirement to an equivalent mass-based standard. The calculations show that EPA's BSER for existing EGUs presumes that all growth in renewable generation displaces generation from existing EGUs, rather than avoiding new fossil generation. This is not a realistic assumption for Florida. Consequently, EPA overstates the level of future renewable generation reasonably attributable to existing affected EGUs. If EPA continues to include renewable generation in establishing emission standards, then it should explicitly set standards for renewable generation that directly displaces existing affected EGU generation.

Furthermore, it appears that EPA has not taken into account requirements under PURPA and Florida law regarding the purchase of renewable energy by Florida utilities. The FPSC is required by these laws to take into account the utility's avoided cost when reviewing the purchase of renewable energy generation. The FPSC asserts that federal and Florida law, along with the technical feasibility of renewables in Florida (not in North Carolina or the region), should determine the extent of renewable generation that could be developed and used to offset emissions from fossil sources.

d. Building Block 4

The EPA's BSER determination should not include reductions attributable to energy efficiency programs because these programs are not under the direct control of the utility and cannot be traced to solely offsetting CO₂ emissions from existing affected EGUs. The EPA would need to demonstrate a direct correlation to a specific affected EGU using a generating unit-by-generating unit analysis. To the best of the FPSC's understanding, EPA has yet to perform such an analysis. Florida should, however, have the discretion to comply with any standards by utilizing cost-effective end-use energy efficiency programs that can be demonstrated to permanently reduce CO₂ emission at an affected EGU, while also not sacrificing reliability or resulting in excessive cost impacts.

If EPA continues to include energy efficiency as a component of its BSER, it should modify Florida's energy efficiency requirement to reflect Florida-specific realities. The EPA's

proposed ten percent reduction in net retail electric sales as a result of Building Block 4 is unreasonable, in terms of both proposed cost and achievability, based on Florida's actual historic data. In over 30 years of offering demand-side management and energy efficiency programs, the FEECA utilities have reduced winter peak demand by an estimated 6,465 MW and reduced annual energy consumption by an estimated 8,937 GWh. In 2012, FEECA utilities achieved an annual energy consumption reduction of 482.3 GWh. Florida is already implementing the cost-effective energy efficiency measures available under the state's specific circumstances.

Additional MWh savings are becoming increasingly difficult because federal and state energy efficiency standards and building codes have become more stringent, leaving less energy savings potential from utility or other third party actions. Setting an emission performance requirement without considering the Florida-specific technical or achievable potential or the cost-effectiveness of the necessary programs to achieve the requirement is contrary to Florida Statutes and the CAA.

VI. FPSC Concerns Regarding Proposed Rule Implementation

Electricity usage in Florida is impacted by the state's unique weather, customer base, and high reliance on electricity for cooling and heating. Florida has the highest number of cooling degree days of any state in the continental U.S., indicating the greatest need for air conditioning in the summer months. Compared to other states, Florida's customers rely more heavily on electricity to meet their energy needs, rather than the direct use of natural gas or other fuels, for cooling and heating. Residential consumers make up almost 89 percent of Florida's electricity customers. Approximately 85 percent of Florida's residential customers' energy requirements are met with electricity, which makes Florida's customers particularly sensitive to electric rate increases. This, combined with Florida's geography and climate, requires the FPSC to carefully examine all factors related to electricity generation to ensure cost-effective, reliable electricity for all Floridians.

a. Fuel Diversity Consequences

In 2012, Florida utilities had a net summer generating capacity of 57,454 MW.³⁸ Transmission capability to import energy into peninsular Florida from other states is approximately 3,600 MW, some of which is already committed to the import of out-of-state generation to meet the state's current and future power needs. Florida's reliance on natural gas as a generation fuel has significantly increased over time and has resulted in a state policy to seek greater diversification in our fuel mix. Currently, approximately 60 percent of the electric power in Florida is generated from natural gas. The concern with Florida's current dependency on natural gas generation pales in comparison to EPA's modeled projection that by 2025 Florida will be using natural gas generation to serve 85 percent of load.³⁹

Florida law requires the FPSC to determine the need for new generating facilities and specifically to consider the need for electric system reliability and integrity, adequate electricity at a reasonable cost, and the need for fuel diversity and supply reliability.⁴⁰ It is important for Florida to maintain a diversified generation fuel source mix when seeking to comply with relevant CO₂ standards because a diversified fuel supply can enhance system reliability and significantly mitigate the effects of volatile fuel price fluctuations, extreme weather events and unplanned plant outages. Additional pipeline capacity would have to be built to accommodate a further reliance on natural gas as a generating fuel. One of Florida's primary pipelines crosses the Gulf of Mexico and is subject to some risk of hurricanes, which adds to the concern of diminished fuel diversity.

b. Reliability Consequences

The FPSC is also concerned about the impact of additional intermittent resources on service reliability requirements. Because of the state's unique characteristics described earlier, Florida requires a robust, diverse, and dispatchable baseload generating fleet. However, many of

³⁸ Florida Public Service Commission, Facts and Figures of the Florida Utility Industry (Mar. 2014) p. 1. <http://www.floridapsc.com/publications/pdf/general/factsandfigures2014.pdf>

³⁹ EPA's "Parsed File" Option 1 State, 2025.

⁴⁰ Section 403.519(3), Florida Statutes.

the low- or zero-carbon technologies EPA assumes in its Building Block 3 allocation to Florida are intermittent, non-dispatchable, non-baseload technologies. For example, in 2013, the monthly capacity factor for solar photovoltaics in the U.S. ranged from 13 to 22 percent.⁴¹ Due to operational constraints from the availability of sunshine, there is no currently demonstrated baseload solar option. The low capacity factors of many low- or zero-carbon technologies (excluding nuclear and possibly co-firing with biomass) combined with Florida's need for dispatchable baseload generation means that Florida would likely need to build additional natural gas-fired facilities and related infrastructure for use as stand-by units for reliability purposes simply because of EPA's assumed requirement.⁴² A recent report assessing Germany's efforts to increase renewable generation resources noted an expected cost increase associated with re-dispatch, curtailment, and other remediation actions necessary to maintain reliability.⁴³ EPA errs in failing to account for these additional expenditures or the implementation time needed to ensure electric reliability.

c. Need for Safety Valve

Given the untested approach EPA has used in developing the BSER and the broad application of non-state specific assumptions, there remains considerable uncertainty about the ability of states to comply with these stringent performance requirements. Such uncertainty calls for some type of off-ramp or safety valve for those states that – despite their best efforts – cannot fully comply with the performance requirements. Safety valve modifications could take the form of a relaxation of the performance requirements, exemptions for must run or critically needed units, or extension of time to meet the 2030 requirement. State Implementation Plans should be allowed to include such provisions to guard against unforeseen impacts on reliability and cost. It is imperative that any rule EPA adopts contain such flexibility.

⁴¹ U.S. Energy Information Agency, Electric Power Monthly (February 2014), Table 6.7.B. *available at* http://www.eia.gov/electricity/monthly/current_year/february2014.pdf.

⁴² http://www.brattle.com/system/publications/pdfs/000/005/060/original/Solar_Energy_Support_in_Germany_-_A_Closer_Look.pdf?1406753962.

⁴³ *Id.*, pp. 28-37.

d. Cost of Proposal

At this time, states cannot even begin to develop reliable estimates of compliance costs with the Proposed Rule. Without knowing the final requirements of an EPA approved State Implementation Plan, individual utilities will not be able to determine their most cost-effective compliance path. In turn, states will not be able to develop aggregate costs resulting from consolidation and coordination of each utilities' compliance plans across the state. However, the Commission is confident that if EPA's proposed BSER is not revised, the stringent emission performance requirements will require substantial compliance costs for Florida. These costs include compliance costs assumed in the Building Blocks and additional costs such as the building of new natural gas pipelines, the building of new generation, the possible improvements and/or building of new transmission lines, and the cost of stranded assets resulting from the premature retirement of existing baseload generation. Therefore, any estimate of compliance costs may be grossly understated at this time. It is important to emphasize that pursuant to Florida Statutes, investor-owned electric utilities are entitled to recover prudently incurred costs in complying with environmental laws or regulations, including the Clean Air Act.⁴⁴

Preliminary estimates from the Florida Electric Power Coordinating Group, Environmental Committee, support the conclusion that EPA may have understated the potential range in its estimated direct and indirect costs. These preliminary estimates show that average statewide retail rates could increase 25 to 50 percent by 2030 as a result of the Proposed Rule.⁴⁵ This estimated range of potential impact is necessarily based on idealized and simplifying assumptions for high-level screening purposes.

VII. Conclusion

The FPSC recognizes the necessity and role of EPA in addressing public health and environmental issues. However, as discussed throughout these comments, the proposed emission

⁴⁴ Section 366.8255, Florida Statutes.

⁴⁵ Florida Electric Power Coordinating Group, Environmental Committee, *Impact of EPA's CO2 Proposal on Florida's Electric Generation System*, October 2014.

reductions do not reflect what is technically or economically feasible in Florida. There are at least three critically needed revisions before EPA moves forward with the Proposed Rule. First, EPA should set performance requirements on affected EGUs subject to Section 111(d) and those requirements should be established for these EGUs based on specific technology and equipment at these facilities or other onsite actions within the control of a utility. Second, any components of the BSER should be based on Florida-specific policies and circumstances, rather than using national and regional assumptions. Lastly, the EPA should only establish a final compliance date. Interim performance requirements should not be mandatory, to allow time to construct new and upgraded electric grid and fuel infrastructure so as not to jeopardize reliability. EPA's failure to consider and incorporate concerns raised in these comments will result in unreasonable and costly emission performance requirements for Florida and its ratepayers.

ANDY GARDINER
President of the Senate



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STEVE CRISAFULLI
Speaker of the House of Representatives



November 30, 2014

Gina McCarthy, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Submitted through eRulemaking portal

Re: Docket ID EPA-HQ-OAR-2013-0602

Dear Administrator McCarthy:

The Florida Office of the Public Counsel (OPC) submits the attached comments on the EPA's Proposed Rule regarding Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units on behalf of the ratepayers of the State of Florida. While OPC appreciates and recognizes the difficulty the EPA faced in crafting this Proposed Rule, OPC has concerns and reservations regarding the methodology used and how that methodology will affect Florida's ratepayers.


OPC's primary concerns, which are addressed in detail in the attached comments, are the choice of 2012 as a benchmark year and the methodology used in the building blocks to reach the final goal. The use of 2012 as a benchmark year, instead of 2005 as originally suggested by the President in his Climate Action Plan, effectively negates many of the CO₂ reductions already funded by Florida's ratepayers. Furthermore, based on available figures from the EPA, EIA, and the Florida Public Service Commission, the methodology used to reach Florida's final goal has a potential impact of \$26.55 billion dollars in additional capital expenditures that will ultimately be borne by Florida ratepayers. OPC respectfully requests the EPA consider the significant economic impacts, as explained in the attached comments, that the Proposed Rule will have on Florida's ratepayers when finalizing this Rule.

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Finally, OPC understands that other Florida state agencies, such as the Florida State Attorney General's Office, Florida Department of Environmental Protection, and the Florida Public Service Commission may also submit comments on the Proposed Rule. OPC's attached comments stand on their own and we believe are also fully consistent with the comments submitted by other State of Florida agencies. Furthermore, by submission of these comments, OPC does not waive any rights to challenge the carbon emissions rules on behalf of Florida ratepayers.

Thank you for your consideration of these comments as you move forward with the difficult task of finalizing this Rule.

Sincerely,



John J. Truitt
Associate Public Counsel

**UNITED STATES OF AMERICA
BEFORE THE ENVIRONMENTAL PROTECTION AGENCY**

Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility
Generating Units

Docket ID No. EPA-HQ-OAR-2013-0602

COMMENTS OF THE FLORIDA OFFICE OF THE PUBLIC COUNSEL

The Office of the Public Counsel (OPC), pursuant to Section 350.0611, Florida Statutes (2014), is charged with representing the citizens of Florida in electric utility proceedings before the Florida Public Service Commission (FPSC). As the statutory representative of the citizens, OPC closely follows legislation and proposed rules that will create economic impact to Florida's ratepayers. The Environmental Protection Agency's proposed rule entitled "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units" (Proposed GHG Rule) will cause economic impacts on Florida's ratepayers by adding an additional layer of environmental regulation on Florida's electric utilities. Section 350.0611(5), Florida Statutes (2014), encourages the OPC to participate in this type of rulemaking. Therefore, OPC appreciates the opportunity to provide comments on the Proposed GHG Rule.

OPC, as counsel for Florida's ratepayers, provides legal representation for those ratepayers on all matters before the FPSC. Therefore, OPC's scope of representation is potentially as broad as the jurisdiction of the FPSC. The FPSC's jurisdiction covers the planning, development, and maintenance of a coordinated electric power grid throughout Florida.¹ Furthermore, the FPSC regulates the rates, operations, and safety of Florida's five investor-owned utilities, as well as the safety, rate-structure, and planning of Florida's

¹ § 366.04(5), Fla. Stat. (2013).

municipally-owned and rural electric cooperatives.² The FPSC also determines rate relief for prudently incurred costs to comply with new environmental requirements.³ Although the Proposed GHG Rule is clear in that the EPA is not mandating the method an individual state must use to reach the proposed CO₂ goals, it is clear that the proposed State target of a 38% reduction in CO₂ emissions, regardless of the method or combination of methods chosen by Florida, will impact cost recovery/rate impact, thereby impacting Florida's citizens. Of particular concern to Florida's ratepayers is that comments by EPA officials during press conferences indicate that, once a State incorporates the Final Goals into an EPA approved State Plan, the resulting targets, and their corresponding costs, will be inflexible.

The following comments will provide a basic background of the utility portfolio present in Florida, which will act as the basis for the specific comments that follow. After the background, the comments will address each of the EPA's building blocks. The comments for each building block will compare the actual Florida utility data with the assumptions used by the EPA in determining the reduction for each building block. After addressing the building blocks, the next section will address concerns OPC has with the EPA's selection of 2012 as the benchmark year. The conclusion will then combine the individual building block analyses and test year concerns to address Florida's Final Goal contained in the Proposed GHG Rule.

Background

Florida's unique weather, customer base, and high reliance on electricity for cooling and heating dictate Florida's electricity usage. Florida has the highest number of cooling degree days of any state in the continental U.S. Residential customers, many on fixed incomes, comprise 89 percent of Florida's electricity consumers. Florida also has a large population of senior citizens

² § 366.04, Fla. Stat. (2013).

³ § 366.8255, Fla. Stat. (2013).

on fixed incomes. Only 7 percent of Florida customers have access to natural gas service, and the vast majority relies on electricity to meet residential needs. This, combined with Florida's unique geography and climate, requires Florida to carefully examine all factors related to electricity generation to ensure cost-effective, reliable electricity for all Floridians.

Florida is unique in its geographical location. As a peninsular state, Florida's interconnections and transmission capabilities are limited. As noted in the FPSC's comments regarding the Proposed GHG Rule, transmission capability to import energy is limited to 3,800 megawatts (MW), or just 6.6 percent of Florida's summer capacity. This limited transmission capability forecloses many of the proposed regional options in the Proposed GHG Rule.

In 2012, the benchmark year chosen by the EPA, Florida ended the year with 57,454 MW of total generating capacity (summer).⁴ Renewable energy sources comprised 1,400 MW, or 2 percent, of Florida's total generating capacity.⁵ Natural gas fueled 65 percent of Florida's electricity generation, while coal supplied only 20 percent of Florida's generation.⁶ For 2012, CO₂ emissions from electric generation in Florida were 1,199 pounds per megawatt hour (lbs/MWh) of CO₂.⁷ The Proposed GHG Rule establishes a Final Goal for Florida of 740 lbs/MWh of CO₂.⁸

Building Blocks

Although the Proposed GHG Rule expresses that states are free to choose the method or methods they will use to reach the proposed Final Goals,⁹ the Proposed GHG Rule reached the

⁴ Florida Public Service Commission, Facts and Figures of the Florida Utility Industry, 1 (Mar. 2014).

⁵ Florida Public Service Commission, Review of the 2012 Ten-Year Site Plans for Florida's Electric Utilities, 27 (Dec. 2012).

⁶ Florida Public Service Commission, *supra* note 4, at 2.

⁷ U.S. Environmental Protection Agency, Goal Computation Technical Support Document, 25 (June 2014).

⁸ *Id.*

⁹ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830, at 34,837 (proposed June 18, 2014) [hereinafter Proposed GHG Rule].

proposed Final Goal by using a building block analysis to reach a 38% reduction for Florida. Therefore, the following block by block analysis will address each block individually using data from the 2012 benchmark year as well as historical data to illustrate trends.

Block 1

Block 1 addresses CO₂ reductions through heat rate improvements of coal-fired generating plants.¹⁰ The Proposed GHG Rule claims implementation of best practices should result in a 4 percent improvement and additional technical potentials should result in another 2 percent gain, providing an overall heat rate improvement of 6 percent.¹¹ Should the improvements in Block 1 prove attainable, the EPA estimates a 30 lbs/MWh reduction in Florida's CO₂ emissions.¹²

The EPA estimates the cost of implementing heat rate improvements at "relatively modest capital costs" of \$100 per kilowatt (kW).¹³ Using Florida's 2012 coal capacity of 11,491 MW, Florida consumers would pay \$1.15 billion for these heat rate improvements. Although some of these costs may be offset by lower fuel costs per MWh, a fluctuation of fuel prices could also eliminate any savings. Moreover, Florida's investor owned utilities are incentivized to improve heat rate performance, and historical data shows sustained heat rate improvements are not easily achieved.

In 1980, the FPSC developed a generating performance incentive factor program (GPIF) for investor-owned utilities, which encourages utilities to maximize unit heat rate efficiency. Targets are set annually through a formal hearing procedure, and investor-owned utilities either gain rewards or suffer penalties based on the prior year's performance compared to the

¹⁰ *Id.* at 34,859.

¹¹ *Id.* at 34,860-61.

¹² U.S. Environmental Protection Agency, *supra* note 7.

¹³ Proposed GHG Rule, *supra* note 9, at 34,905.

previously set annual targets. The GPIF program creates multi-million dollar incentives for utilities to maximize efficiencies at their fossil-fired units. In over 30 years of offering incentives, Florida has not seen consistent heat-rate improvements in the 6 percent range as suggested in the Proposed GHG Rule. In the last 5 years alone, heat rate efficiencies ranged from negative 8 percent to positive 4 percent, even with the GPIF program incentives.

Rather than relying on an across-the-board assumption of a 6 percent improvement to calculate a Final Goal, OPC suggests that a more state-specific analysis be utilized, which will take into account, not only potential for heat rate improvements (as verified through historical data under incentive programs like the GPIF program), but also steps already taken to increase efficiencies in the state's fleet. A state-specific fleet analysis is more reasonable in determining a state's Final Goal.

Block 2

Block 2 addresses CO₂ emission reductions by increasing natural gas combined cycle (NGCC) plants to a 70 percent utilization rate.¹⁴ Currently, Florida utilities use an economic model for dispatching their generation fleet, which results in the lowest economic burden for Florida's citizens. Daily and hourly fluctuations in fuel prices and other factors are included in their models to ensure that the demands are met with the most cost-effective generation. These cost savings are passed directly to the customers.

In the EPA's calculation of the Block 2 emission reduction for Florida, the EPA states that Florida's NGCC plants operated at a capacity factor of 51 percent.¹⁵ Based on the EPA's calculations of a re-dispatch change from 51 percent to 70 percent of capacity, the EPA

¹⁴ Proposed GHG Rule, *supra* note 9, at 34,864.

¹⁵ U.S. Environmental Protection Agency, Data File: Goal Computation – Appendix 1 and 2, <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents> (last updated June 26, 2014).

calculates a CO₂ emissions reduction of 287 lbs/MWh, or approximately 15.1 lbs/MWh per percent increase in re-dispatch where the re-dispatch to NGCC replaces coal-fired generation.¹⁶

The EPA's characterization that Florida's NGCC fleet operated at a "51 percent capacity factor" in 2012 is incorrect. While the EPA uses the phrase "utilization rate" in the Proposed GHG Rule,¹⁷ the EPA uses the phrase "capacity factor" in describing the calculations used to reach the Block 2 reductions.¹⁸ Furthermore, the EPA calculates the Block 2 reductions using 70 percent of the generating unit's nameplate capacity.¹⁹ OPC submits that the EPA errs in using a generator's nameplate capacity in the capacity factor Block 2 calculations.

When discussing generator capacity, system planners and regulators distinguish capacity from nameplate capacity for important reasons that are ignored by the EPA's use of nameplate capacity. A generator's nameplate capacity is "the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer."²⁰ By contrast, the generator capacity is "the maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions."²¹ Effectively, nameplate capacity refers to a generator's maximum output under optimal design conditions; whereas, capacity is a generator's maximum output supplied to load under actual, real-world conditions, which is often referred to as net capacity when referencing both types to avoid confusion. When referring to capacity, system planners

¹⁶ OPC submits that the EPA fails to adequately address the inconsistency in using heat rate improvements in coal-fired units to calculate Block 1 savings, and then partially negates those savings by re-dispatching from those improved coal-fired units to NGCC units for the savings presented in Block 2.

¹⁷ Proposed GHG Rule, *supra* note 9, at 34,864.

¹⁸ U.S. Environmental Protection Agency, *supra* note 7, at 10-11.

¹⁹ *Id.*

²⁰ U.S. Energy Information Administration, Glossary: Generator nameplate capacity, <http://www.eia.gov/tools/glossary/index.cfm?id=G> (last visited July 18, 2014).

²¹ U.S. Energy Information Administration, Glossary: Generator capacity, <http://www.eia.gov/tools/glossary/index.cfm?id=G> (last visited July 18, 2014).

and regulators refer to the real-world, actually available capacity, not the theoretical, under-perfect-design-conditions nameplate capacity used by the EPA. The EPA even states it wanted to use net generating capacity but asserts, incorrectly, that net capacity data was not readily available.²² Therefore, the EPA chose to use nameplate capacity.²³

Although the EPA errs in the use of nameplate capacity, the EPA states “we are proposing goals expressed in terms of net generation,” because generators currently use net generation for reporting purposes.²⁴ OPC suggests the EPA should use the actually measurable net capacity instead of the theoretical nameplate capacity in calculating reductions under Block 2. Moreover, state regulators use net capacity incorporating summer and winter capacity ratings when determining reserve margins for planning purposes. For Block 2 calculation purposes, the EPA should use 70 percent of net capacity, because that more accurately represents an achievable percentage as proven by real world testing as well as allows a reasonable reserve margin. An increase above 70 percent of net capacity decreases available reserve margins and could require additional capital expenditures, which would be wholly funded by Florida’s citizens, to ensure system reliability.

By using the measureable and achievable net capacity of Florida’s NGCC fleet as listed in Form EIA-860 for 2012²⁵ and the EPA’s generation numbers from the Data File: 2012 Unit-

²² U.S. Environmental Protection Agency, GHG Abatement Measures, 3-6 (June 2014). The U.S. Energy Information Agency’s database of Forms EIA-860 contains summer and winter capacities for facilities across the U.S. The EPA even refers to Form EIA-860 elsewhere in the GHG Abatement Measures; therefore, it is inexplicable that the EPA chose to use the theoretical nameplate capacity over the known and modeled summer/winter capacities reported in the documents the EPA used to perform the Block 2 analysis.

²³ *Id.*

²⁴ Proposed GHG Rule, *supra* note 9, at 34,894.

²⁵ U.S. Energy Information Administration, Form EIA-860 for 2012, *available at* <http://www.eia.gov/electricity/data/eia860/index.html> (last visited July 18, 2014).

Level Data Using the eGRID Methodology,²⁶ Florida's NGCC fleet operated at a 61 percent capacity factor for 2012, not 51 percent as used in the calculations for the Block 2 reductions. This difference in the benchmark data results in a reduction of 135.9 lbs/MWh under Block 2 instead of 287 lbs/MWh. A reduction of 135.9 lbs/MWh under Block 2 for Florida is more reasonable since it is based on the correct benchmark data and maintains a reasonable reserve margin to ensure system reliability without incurring additional and unnecessary capital expenditures. However, due to the volatility in fuel prices, the costs associated with maintaining this rate need to be calculated to properly estimate the compliance costs.

Geographic Re-Dispatching Issues

The Proposed GHG Rule limits re-dispatching to within a region's existing fleet.²⁷ The Proposed GHG Rule places Florida in a southeast region with Kentucky, North Carolina, South Carolina, Tennessee, Mississippi, Alabama, and Georgia. As discussed in the Background section above, Florida's import transmission capability is limited to approximately 3,800 MW, or 6.6% of total capacity. Thus, Florida's geographical location and corresponding energy import limitations should minimize reliance on regional dispatch hypotheticals and confine Florida's re-dispatch increases (for Final Goal computation) to those within the State going from 61 to 70 percent as discussed above.

Block 3

Block 3 addresses CO₂ emission reductions by using less carbon intensive generating capacity. The EPA accurately states Florida's renewable energy generation capacity in 2012 was

²⁶ U.S. Environmental Protection Agency, Data File: 2012 Unit-Level Data Using the eGRID Methodology, <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents> (last visited July 18, 2014).

²⁷ Proposed GHG Rule, *supra* note 9, at 34,865.

2 percent of total generating capacity.²⁸ The Proposed GHG Rule bases the Final Goal on Florida increasing its renewable generation levels to 10 percent,²⁹ which results in emission reductions of 70 lbs/MWh for Block 3.³⁰

The Proposed GHG Rule is unclear as to the measurement of renewable energy used to calculate the Block 3 portion of the Final Goal. First, the EPA references the renewable energy capacity in a state;³¹ however, the EPA then states that the 10 percent figure applies to total annual generation.³² Given the difference in capacity factor for renewables, which are accepted to have a capacity factor significantly lower than the fossil-fuel fired generation they will replace, versus the total annual generation in MWh, OPC submits the EPA should clarify that the 10 percent level equals 10 percent of a state's generating capacity. Therefore, using 2012 benchmark figures for determining the Block 3 portion of the Final Goal, renewable energy would account for 5,745 MW of generating capacity. In 2012, Florida had 1,400 MW of renewable energy generating capacity, so Florida would need a 4,345 MW increase of renewable generating capacity to reach the figures the EPA used to calculate the CO₂ emission reductions in Block 3.

Using the U.S. Energy Information Agency's most recent installed costs for utility scale photovoltaic (PV) of \$3,873 per kW,³³ the installed cost of 4,345 MW of PV is \$16.8 billion. When determining the need for new electric generating facilities, Florida law requires the consideration of renewable energy resources; however, under these same statutes, Florida's citizens are protected from funding excessive capital projects, because the FPSC must also

²⁸ *Id.* at 34,868.

²⁹ *Id.*

³⁰ U.S. Environmental Protection Agency, *supra* note 7.

³¹ Proposed GHG Rule, *supra* note 9, at 34,866.

³² *Id.* at 34,868.

³³ U.S. Energy Information Agency, Updated Capital Cost Estimates for Utility Scale Electricity Generating Plants, at 6 (Apr. 2013).

consider cost-effectiveness.³⁴ As cost-effectiveness is a mandate under State law, OPC is concerned about the reasonableness of the cost of renewable energy technologies used to develop the Block 3 component of the Final Goal. The cost of achieving the CO₂ emissions reductions using a proposed 10 percent renewable energy component for calculating the Final Goal does not appear reasonable.

Reliability

Reliability is a very real and very significant concern due to Florida's limited interstate transmission capability. Furthermore, Florida's annual cooling degree days are the highest in the continental U.S. Due to these factors, Florida must rely on intrastate generating facilities capable of continuously meeting high levels of demand reliably. Thus, Florida relies heavily on a robust and dispatchable generating fleet. Many of the low carbon/zero carbon technologies the EPA uses to justify the 10 percent Block 3 calculation are intermittent, non-dispatchable, non-base load technologies. For example, in 2013, PV's capacity factor ranged from 13 to 22 percent.³⁵ The low capacity factors of many low carbon/zero carbon technologies (excepting nuclear) combined with Florida's need for dispatchable generation means Florida would need to build additional natural gas-fired facilities and related infrastructure, which would again be fully paid for by Florida's citizens, for use as stand-by units for reliability purposes. The EPA errs in failing to account for these additional capital expenditures needed to ensure system reliability.

Block 4

Block 4 calculates CO₂ emission reductions based on a proposed increase in demand side energy efficiency. The Proposed GHG Rule suggests a final demand-side energy efficiency

³⁴ § 403.519(3), Fla. Stat. (2013).

³⁵ U.S. Energy Information Agency, Electric Power Monthly (July 28, 2014), available at <http://www.eia.gov/electricity/monthly/>.

savings of 10 percent for calculating the Final Goal.³⁶ As with Block 3, the Proposed GHG Rule Block 4 analysis states both a 10 percent avoided capacity and 10 percent of annual sales.³⁷ The EPA should clarify whether the 10 percent applies to avoided capacity or the percentage of annual sales. The EPA used generalized historical data and EPA analysis to propose that an annual 1.5 percent reduction in capacity demand, culminating in a 10 percent reduction, is reasonable. However, OPC submits that Florida's historical demand-side energy management (DSM) data proves otherwise.

Florida's DSM program began in 1981. The Florida Energy Efficiency and Conservation Act (FEECA) declares the use of DSM programs to be critical and directs the FPSC to adopt goals and approve plans to implement DSM programs in Florida.³⁸ Since 1981, Florida consumers have paid more than \$5.7 billion for DSM programs.³⁹ Florida Statutes require that conservation goals be established at least every 5 years after a careful analysis of technical potential, cost-effectiveness, and other factors.⁴⁰ FEECA utilities then submit compliance plans that are reviewed and considered by the FPSC to ensure they do not result in an undue rate impact. In the benchmark year of 2012, DSM programs achieved a reduction of 259.7 MW (0.45 percent of total capacity) at a cost of \$388 million, or \$1.49 million per MW of capacity need avoided by DSM. The Proposed GHG Rule's use of 10 percent DSM avoided capacity, which equals 5,745 MW for the 2012 benchmark year, will cost an estimated \$8.6 billion each year. Although DSM programs remain critical to the Florida energy mix, OPC suggests the EPA's proposal of a 10 percent reduction for purposes of calculating the Final Goal as unreasonable

³⁶ Proposed GHG Rule, *supra* note 9, at 34,873.

³⁷ *Id.*

³⁸ § 366.81, Fla. Stat. (2013).

³⁹ Florida Public Service Commission, Annual Report on Activities Pursuant to the Florida Energy and Conservation Act, 11 (February 2014).

⁴⁰ § 366.82, Fla. Stat. (2013).

both in terms of proposed cost and achievability based on Florida's actual historical data. OPC believes setting an arbitrary goal without considering the technical potential or the cost-effectiveness of the programs to achieve the goal is contrary to Florida Statutes.

Benchmark Year

Besides the technical issues with the building blocks discussed above, OPC has concerns with EPA's selection of 2012 as the benchmark year. The Proposed GHG rule is designed to "achieve CO₂ emission reductions from the power sector of approximately 30 percent from CO₂ emission levels in 2005."⁴¹ Clearly, the Proposed GHG rule is designed to reduce the nation's CO₂ emissions as a whole, and the EPA clearly contemplated that each state will be affected differently. However, Florida took the initiative to move to a lower carbon energy portfolio long before the President's Climate Plan was announced. Florida's ratepayers funded plant upgrades that created cleaner utility plants and the construction of new plants that burn cleaner, more efficient fuels, such as natural gas and nuclear, long before the Proposed GHG rule was announced. As discussed previously, Florida's CO₂ emission rate in 2012 was 1,199 lbs/MWh, which is a reduction of 30% from 2005 levels. Florida's ratepayers funded that reduction. The Proposed GHG Rule would cause Florida's ratepayers to fund another 38% reduction, essentially ignoring strides already made. OPC submits the Proposed GHG Rule's failure to consider previous reductions makes the rule overly burdensome and arbitrary, especially compared to the minimal reductions in other states that have not already spent billions of dollars creating a cleaner fleet of electric utilities.

Conclusion

⁴¹ Proposed GHG Rule, *supra* note 9, at 34,832.

The Proposed GHG Rule has the potential for significant rate and reliability impacts on Florida's ratepayers. OPC submits the capital expenditures totaling almost \$27 billion to reach the reductions proposed under Blocks 1, 3, and 4 are unreasonable. Furthermore, Florida's unique peninsular geography and limited import transmission capabilities isolate Florida in such a manner that a reasonable Final Goal for Florida must be determined using Florida-specific data rather than national or regional data.

Fortunately, Florida implemented programs to incentivize heat rate improvements and demand-side energy efficiency more than 30 years ago. Thus, there is a lengthy historical record for both the cost/benefits analysis and reasonableness of Blocks 1 and 4. The historical data does not confirm the reasonableness of a 6 percent heat rate improvement nor a 10 percent demand-side energy efficiency capacity avoided. Furthermore, using the U.S. Energy Information Agency's current capital cost estimates, the cost of increasing renewable energy capacity by the amount presented in Block 3 for Final Goal calculations for Florida is not reasonable. Furthermore, the lack of clarity as to whether the Proposed GHG Rule addresses percentage of capacity or percentage of annual generation for determining the Final Goal numbers for Blocks 3 and 4 creates confusion. Finally, the capacity factor used to calculate the emission reductions under Block 2 is inaccurate, resulting in an unreasonable Block 2 calculation for purposes of the Final Goal. The EPA should use net capacity based on reported summer and winter capacity factors to ensure adequate reserve margins and system reliability.

Notwithstanding the technical issues of the Building Blocks discussed at length above, the Proposed GHG Rule fails to consider the great drop in CO₂ emissions in Florida over the seven years preceding the benchmark year of 2012. Florida's ratepayers have already funded capital projects that resulted in a reduction in CO₂ emissions of 30%. Mandating Florida

ratepayers to fund another 38% reduction, especially in light of minimal reductions in other states, is arbitrary and unfair.

The issues listed above result in an unreasonable proposed Final Goal for the State of Florida. Alternatively, the EPA should establish achievable state goals based on a state-specific analysis conducted by the relevant state agencies using best system of emission reduction methods achievable at the source. Additionally, all data inputs for the analyses should use accurate and historical state-specific data when available.

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
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April 8, 2015

Ms. Allison D. Wood
Partner
Hunton & Williams LLP
2200 Pennsylvania Avenue, N.W.
Washington, D.C. 20037

Dear Ms. Wood:

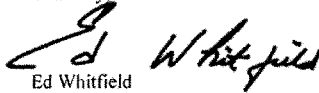
Thank you for appearing before the Subcommittee on Energy and Power on Tuesday, March 17, 2015, to testify at the hearing entitled "EPA's Proposed 111(d) Rule for Existing Power Plants: Legal and Cost Issues."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Wednesday, April 22, 2015. Your responses should be mailed to Nick Abraham, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed to Nick.Abraham@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Ed Whitfield
Chairman
Subcommittee on Energy and Power

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy and Power

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ALLISON D. WOOD
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April 22, 2015

Via First Class Mail and Electronic Mail

Nick Abraham
Legislative Clerk
House of Representatives
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

Re: Hearing on "EPA's Proposed 111(d) Rule for Existing Power Plants: Legal and Cost Issues," Responses to Additional Questions for the Record

Dear Mr. Abraham:

Pursuant to the April 8, 2015 request of the Honorable Ed Whitfield, Chairman of the Subcommittee on Energy and Power for the Committee on Energy and Commerce, enclosed please find my responses to the additional questions for the record.

I truly am honored to have been asked to testify before the Subcommittee on this important topic. Please let me know if there is anything further that you need.

Sincerely,

[REDACTED]

Allison D. Wood

Responses to Additional Questions for the Record

The Honorable Ed Whitfield

1. **With respect to EPA's section 111(d) for existing fossil fuel-fired electric utility generating units, please describe the procedure and timing for States and other affected parties to file legal challenges to a final rule, and please describe the litigation and appeals process for such legal challenges.**

Under section 307(b)(1) of the Clean Air Act (42 U.S.C. § 7607(b)(1)), petitions for review challenging a final section 111(d) rule must be filed in the United States Court of Appeals for the District of Columbia Circuit within 60 days after publication of the final rule in the Federal Register. Parties also have the option of filing a petition for reconsideration with EPA but the filing of such a petition does not extend the time period for filing a petition for review in the D.C. Circuit, and it does not postpone the effectiveness of the rule.

After the 60-day deadline for filing petitions for review has passed, the court will consolidate all of the petitions for review challenging the rule into a single proceeding. There will be a period of time during which preliminary motions may be filed, such as motions to dismiss, dispositive motions, or motions for a stay. Unless a motion for a stay is filed and granted (which is extremely rare), the rule will remain in effect during the pendency of the litigation.

In complicated cases involving multiple parties (which will certainly be the case with regard to any final section 111(d) rule), the court will usually ask the parties to try to agree on a format and schedule for briefing. If the parties do not agree, competing motions may be filed. The court will then set a briefing schedule, and oral argument will typically be heard a month or two after the completion of briefing. The court generally issues its opinion within three to four months after oral argument. This entire process from the filing of the petition for review until the issuance of the opinion by the court typically takes about two years.

Once the court issues its opinion, the parties have the option of filing a petition for rehearing seeking to have the three judge panel reconsider its decision and/or to file a petition for rehearing en banc seeking to have all of the judges in the D.C. Circuit reconsider the case. The D.C. Circuit does not have to grant petitions for rehearing and may deny them without even asking for a response from the other parties.

The parties also have the option of filing a petition for a writ of certiorari with the U.S. Supreme Court asking that Court to review the D.C. Circuit's decision. This option may be exercised regardless of whether a petition for rehearing was filed with the D.C. Circuit. A petition for a writ of certiorari must be filed within 90 days of the D.C. Circuit's entry of judgment in the case (entered the same day the opinion is issued) or within 90 days of the disposition by the D.C. Circuit of any petitions for rehearing that might have been filed. The Supreme Court is not required to hear the appeal (i.e., grant the petition for a writ of certiorari) and may deny the petition without any explanation.

2. For EPA's section 111(d) rule for existing fossil fuel-fired electric generating units, approximately how long do you estimate that it would take courts to complete judicial review of the legal challenges to a final rule?

I would expect the initial litigation in the D.C. Circuit to take approximately two years from the time the petition for review is filed starting the case until the court issues its opinion. If any of the parties then decided to file a petition for rehearing, which often happens in these types of cases, that could add another six months. Thus, the total time in the initial litigation in the D.C. Circuit would be between two and two and a half years.

If any of the parties then sought review by the Supreme Court, it would take approximately six months for the petition for a writ of certiorari to be briefed and for the Court to decide whether to take the case. If the Supreme Court decided not to take the case, that would be the end of the litigation. In this event, the total time for the litigation would be approximately three years. On the other hand, if the Supreme Court did decide to take the case, that would add approximately another eight months until the Supreme Court issued its decision in the case, bringing the total amount of time to approximately three years and eight months.

In the event the Supreme Court takes the case, however, it is possible that the Supreme Court's decision would not be the end of the litigation but that the case would need to return to the D.C. Circuit for further action. This happened in two recent Supreme Court cases involving EPA Clean Air Act rules: *Utility Air Regulatory Group v. EPA* (involving EPA's greenhouse gas rules for the prevention of significant deterioration and Title V permitting programs) and *EPA v. EME Homer City Generation* (involving EPA's Cross-State Air Pollution Rule). It took 10 months for the D.C. Circuit to resolve the remand issues in *Utility Air Regulatory Group v. EPA*, and it has been a year since the Supreme Court remanded *EPA v. EME Homer City Generation*, and the D.C. Circuit has not yet resolved that case, although a decision is expected soon. To use the *Utility Air Regulatory Group* case as an example, it took four years and ten months for that case to be fully resolved from the time the petition for review was initially filed in the D.C. Circuit until the resolution of the remand issues by the D.C. Circuit after the Supreme Court's decision in the case.